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ABSTRACT

This manual presents Iowa standards for special programs for students with behavioral disorders, describes interventions which appear appropriate for such students, and notes shortcomings with current practices that accentuate the need for these standards. Chapter titles and authors include: "Overview of Project" (Carl Smith and Dennis Dykstra); "From Assessment to Intervention" (Frank Wood); "Applying Standards through Interventions" (David Sodac and Ellen McGinnis); "Increasing Desirable Behaviors" (Mary Davis and Deb Brower); "Managing and Decreasing Undesirable Behaviors" (Al Marshall and Barb Woodard); "Social Skills Training" (Mary Green-Somerville and Polly Nichols); "Affective/Emotional Growth" (Doug Fairchild); "Self-Control Strategies" (Mary Delagardelle and Marlene Studer); "Alternative Academic Instruction" (Linda Fernandez and Nancy Kodros); "Functional Skill Development" (Gary Sasso and Deb Scott-Miller); "Reintegration Plan: General Concepts" (Al Burrows and Linda O'Meara); and "Generalization and Maintenance" (Linda Holvik and Jean Benskin). (JDD)

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The Iowa Program Standards For Interventions In Behavioral Disorders

Iowa Department of Education
Bureau of Special Education

EC 220565

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The Iowa Program Standards For Interventions In Behavioral Disorders

Editors

David G. Sodac

Ellen McGinnis

Carl R. Smith

Frank H. Wood

Dennis J. Dykstra

Nancy Brees

SEPTEMBER 1988

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FOREWORD

Developing a publication such as this requires a commitment from a great many individuals. A broad array of professionals have given both time and effort to the manual you are now reading. These same professionals have been concerned for some time about the inconsistencies in the content of programs offered to students with behavioral disorders. Among the concerns that have been voiced are the perceptions that: (1) some programs provided to such students appear to be primarily focused on controlling undesirable behavior rather than teaching more appropriate behaviors; (2) some programs for such students appear to be largely academic in nature; and (3) some programs do not provide for systematic reintegration to regular education for these students. It was with these concerns in mind that this curriculum project was undertaken.

David Sodac from Mississippi Bend Area Education Agency, Dr. Ellen McGinnis from Des Moines Independent Community School District, and Dr. Frank Wood from the University of Minnesota served as primary editors for this publication. In addition to authoring chapters, these editors reviewed and modified the overall project plan and reviewed all submitted material editorially with a particular focus on the congruency of the various chapters. Their desire and willingness to see this project to its conclusion is to be commended.

Dr. Carl Smith served as the project manager for The Iowa Model for Programs Standards in Behavioral Disorders. Carl served as the Consultant for Behavioral Disorders with the Department of Education when the idea for this manual was conceived. His contribution to the development of this manual, as well as to the field of behavioral disorders, both at the state and national level, is recognized and very much appreciated.

In addition to the review of the manual by the primary editors, eight nationally recognized professionals read and responded to the chapters as drafted with a focus on theoretical soundness and applied issues. These persons were:

Dr. Virginia Brown
Pro-Ed
Austin, Texas

Dr. Sharon Huntze
University of Missouri
Columbia, Missouri

Dr. Kenneth Howell
Western Washington University
Bellingham, Washington

Dr. C. Michael Nelson
University of Kentucky
Lexington, Kentucky

Dr. William C. Morse
University of Michigan
Ann Arbor, Michigan

Dr. Richard Simpson
University of Kansas
Kansas City, Kansas

Dr. Richard Neel
University of Washington
Seattle, Washington

Dr. Mary Kay Zabel
Kansas State University
Manhattan, Kansas

Special thanks go to the authors of the chapters contained in this manual. Their willingness to listen to reviewers' comments and make necessary changes added to the quality of this publication. Without their expertise and cooperation, this manual would not have been possible.

The contribution of the Bureau's clerical staff was invaluable. Teresa Sullivan spent many hours preparing the chapters for final form. Nancy Brees not only prepared chapters, but served as a resource to all of us involved in the project. Her expertise and consistent approach to problem solving made this publication a reality.

Dennis Dykstra

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The Iowa Program Standards For Interventions In Behavioral Disorders

SECTION ONE:

FOCUS FOR USE

Chapter 1: OVERVIEW OF PROJECT

Chapter 2: FROM ASSESSMENT TO INTERVENTION

Chapter 3: APPLYING STANDARDS THROUGH INTERVENTION

Chapter 1

OVERVIEW OF PROJECT

Carl R. Smith, Ph.D.
Associate Professor
Buena Vista College
Storm Lake, Iowa

Dennis J. Dykstra
Consultant, Behavioral Disorders
Iowa Department of Education
Des Moines, Iowa

Chapter 1

OVERVIEW OF PROJECT

Carl R. Smith, Ph.D.
Dennis J. Dykstra

INTRODUCTION

The field of behavioral disorders has experienced an exciting growth in Iowa over the past decade. New programs have been created in our public schools to specifically serve students with these types of handicapping conditions. The programs have supplemented those programs in specialized facilities which had earlier been the sole source of educational services for such students. A new definition of this handicapped population was promulgated in 1983 which attempts to focus on educationally defining such students. A training manual in assessment (Wood, Smith, & Grimes, 1985) was produced soon thereafter to assist educators in implementing this definition.

Three major service delivery models are used to provide instructional services to students with behavioral disorders in Iowa. The majority of these students are served in categorically oriented specialized instructional programs. These vary from partial day programs to totally segregated special education classrooms. Other students with behavioral disorders are served in multidisability resource and special class with integration classrooms. Still others are served by support services provided by school psychologists and school social workers.

Regardless of the type of program model in which a student with behavioral disorders is served, it is imperative that a specialized program dealing with his/her behavioral difficulties be provided. While each of us continue to be impressed with the dedication and skills of the vast majority of our colleagues around Iowa, we are also alarmed at the lack of consistency regarding what is being provided to these students. While we may flinch at the idea of mandated uniformity, it does seem reasonable that our field has reached a point where we can assure our consumers (students and parents) that certain professionally generated quality elements will be provided to them. As one of these authors has written earlier, "Currently, there is confusion regarding what components should be essential in building a program for the behaviorally disordered. To approach excellence such program elements must be defined as standards against which to compare one's programs" (Smith & Wood, 1986, p. 6)

The purpose of this manual is to present such standards and a description of those interventions which appear appropriate for students we call behaviorally disordered. We will also present what we perceive are some of the shortcomings with our current practices that accentuate the need for these standards.

CONCERNS REGARDING CURRENT PRACTICES

Judith Guest wrote a highly popular book titled Ordinary People several years ago. This book chronicles the gradual recovery of an adolescent boy who has been in a psychiatric hospital. In an early scene from the book, the protagonist is waking up and trying to get a focus on the day. He remembers where he is and where he has been (the hospital). He recalls a phrase on which he depends:

Get the motions right. The motives will follow.

To what extent have we stopped our programming when the "motions" are there? One social skills training program used somewhat widely in our state systematically breaks down social competence into some fairly discrete behaviors that can be taught yet may not necessarily add up to a gestalt of social competence. This particular program combines a fairly strong reinforcement system in shaping discrete behaviors. An example of skills taught is "greeting skills" that teaches each child, regardless of age, to stand up, offer their hand, introduce themselves and say "glad to meet you." This display of manners may dazzle school board members and other important people, but it is hard to conceptualize how this particular set of "motions" increases a child's status among his or her peers. While we applaud these efforts in social skills training, we should keep in mind that appropriate training must be of an interactive nature. We need to be aware that our task analysis of complex social behavior may yield independently trained social motions that are meaningless in isolation.

Cox and Gunn (1980) have speculated as to why many children have failed to learn to behave. This includes the variables of skill deficits (a lack of knowledge of the desirable behaviors), motivational deficits (absence of strong rewards) and interfering variables (such as high emotional states). In applying traditional

behavioral programs alone, we have tended to focus on motivations (controlling the rewards and consequences) and have not seemed to focus as strongly on skill and interfering variables.

This leads us to the question of teaching appropriate behaviors in our special programs and the carry-over of such skills into the hallways and classrooms of regular education. Professional literature seems to conclude that the skills we teach will not generalize from our BD classrooms unless we systematically program for them to do so. As we look around, it seems as if quite a bit of our current practices are similar to those described as "training and hoping" in the late 1970s (Stokes & Baer, 1977). Behavioral interventions that stop at the point of skill acquisition in our programs may be teaching our students to behave appropriately — but only in our programs. This may be another example of where, in addition to addressing environmental variables, we may again need to think of establishing the "motives" in our students to match the "motions" they have learned in our special programs.

We also perceive the need to move beyond the theoretical boundaries that have, in some cases, shackled our programs in the past. Some have advocated that behavioral techniques are the elan vital of our programs. Others have asserted that only through "listening" to the emotions of our students will we truly make a difference in their lives. Still others contend that biology is destiny with these students and we should spend our time hooking up our students with medical experts who are capable of truly helping them. Bill Morse (1987) recently wrote:

> Are we looking for the essential nature of the children with whom we work, or are we satisfied with piecemeal attributes? None of us would be guilty of physical abuse of children. But we practice psychological abuse when we employ restricted notions of human nature. Many of the current theories, which have useful and appropriate partial information, fall far short of doing justice when made into total explanations of the complicated nature of human beings — ourselves or our pupils. (12)

With the development of standards we have to be careful not to lock ourselves into one particular theoretical base. As we discuss the standards themselves we think it will become evident that such standards cross the various theoretical boundaries.

We have also been concerned about the extent to which control seems to dominate many of our programs. While a total lack of control will certainly lead to chaos with most, if not all, of the students with whom we work, some of us have gone overboard with the need for control. By this we mean that if we stop with control, exclusively externally oriented, what have we taught our students? You will notice that the standards themselves, as well as the interventions described, cover both external (teacher directed) and internal (student directed) strategies.

Albert Bandura (1973), in commenting on the efficacy of behavioral change strategies, states:

> The method that has yielded the most impressive results with diverse problems contains three major components. First, alternative modes of response are repeatedly modified, preferably by several people who demonstrate how the new style of behavior can be used in checking with a variety of situations. Second, learners are provided with necessary guidance and ample opportunities to practice the modeled behavior under favorable conditions until they perform it skillfully and spontaneously. The latter procedures are ideally suited for developing new social skills, but they are unlikely to be adopted unless they produce rewarding consequences. Arrangement of success experiences, particularly for initial efforts at behaving differently, constitute the third component in this powerful composite method . . . Given adequate demonstration, guided practice and success experiences, this method is almost certain to produce favorable results. (p. 253)

When we look at the external controlling nature of many of our programs, we need to critically assess the extent to which these three elements are a part of such programs.

PROGRAM STANDARDS

Professionals within the behavioral disorders field have difficulty describing in a consistent manner the actual composition of appropriate programs. For example, Grosenick and Huntze (1983), as part of the National Needs Analysis in Behavioral Disorders Project, attempted to review the literature in behavioral disorders to produce a document describing the best practices in the field. They found that the professional literature is seriously lacking in the comprehensive description of successful programs. In reacting to these findings, Paul (1983) stated, "What does this mean? Basically, it means we don't know what's going on in this country in educational services for behaviorally disorders/emotionally disturbed children."

The need to incorporate ideas regarding needed components of programming for students with behavioral

disorders has been stated by Smith and Wood (1986):

> Change has been pervasive in the field of behavioral disorders in the last thirty years. The changes have not necessarily been incorporated into the field overall. A means of disseminating and incorporating changing developments has not yet become operational in our field. Further pressures have been added recently as professionals in special education are being called on by their regular education peers to explain such programs. These factors have led to an increasing need to better understand the field of behavioral disorders in the minds of many special and regular educators. (6)

One pioneering effort in our field to describe essential programming elements was done by McCauley (1976). He proposed that these elements should include (a) philosophy or ideational context, (b) program goals, (c) population definition, (d) program entry procedures, (e) methods, curriculum and materials, (f) exit procedures, (g) evaluation, and (h) building community acceptance. As alluded to earlier, Grosenick and Huntze (1983) applied this outline of program elements to the professional literature and found that the majority of program descriptions in the professional literature failed to provide a comprehensive description of their programs. It should be noted that Grosenick and her colleagues at the University of Oregon have continued to look at this area through a national project aimed at developing standards at the local level through a standards checklist and self-study process.

While the McCauley elements provide a comprehensive view of total programming elements, this volume represents a more focused look at programming with the focus on the classroom environment and the elements of methods, curriculum and materials and exit procedures. It is believed that other materials that have been produced in Iowa, such as the Iowa Perspective volumes and the Iowa Assessment Model in Behavioral Disorders cover more comprehensively the other elements contained in McCauley's outline. We will, however, be discussing the relationship of assessment to program planning, primarily in Wood's chapter.

The program standards which are the focus for the volume and the interventions described within reads as follows:

> **For pupils identified as behaviorally disordered, there shall be documented evidence of the following components:**
>
> **I. A description of the means by which desirable behaviors will be rewarded and increased.**
>
> **II. A description of the means by which undesirable behaviors will be dealt with and decreased, including crisis management techniques and planned disciplinary procedures, if necessary.**
>
> **III. Goals and objectives reflecting interventions to improve interpersonal relationship skills or personal adjustment of the pupil which may include social skills training, affective or emotional growth strategies, and/or self-control strategies.**
>
> **IV. Goals and objectives reflecting alternative academic instruction and/or functional skill development based on special education needs of pupils.**
>
> **V. A reintegration plan specifying how the above areas will be taught in such a way to provide for generalization and maintenance of newly learned skills in settings outside of the training situation.**

Although not adopted in Iowa Rules of Special Education, these program components are considered to be vital and necessary for appropriate and quality BD programming within the state. The contents of this training manual provide more detail on each of these proposed components. However, it may be helpful to briefly review each of the components here.

Increasing Desirable Behaviors

With students with behavioral disorders it is often easy to be sidetracked by all of the negative behaviors that we forget the positive behaviors exhibited by such students that actually need to be increased. We also need to keep in mind that as a student decreases their inappropriate behavior that more positive behaviors will be needed to replace the eliminated negative behaviors.

Decreasing Inappropriate Behaviors

This has been one of our primary emphases in the past. What are the appropriate options we should survey in selecting our interventions to decrease those behaviors which are unacceptable in the school setting? What are our plans for dealing with crisis situations? What are our planned disciplinary procedures to be used with such students?

Skill Training

Rather than just decreasing or increasing behaviors, we also need to address the teaching of inter- and intra-personal skills with students with behavior disorders. What procedures do we have in our programs to systematically deal with social skills training, affective or emotional growth strategies, and/or self-control strategies?

Academic/Functional Skills

Although we may largely focus on the behaviors of the students we serve, we also need to keep in mind their academic needs. For some students this may take the form of a traditional academic program. For others it may take the form of a functional focus with needed independent living skills taking priority over traditional academic instruction.

Reintegration

What are our plans for returning our students back to regular education? How do we plan to assure that the skills we teach will be performed outside of our instructional settings?

ASSESSMENT AND PROGRAM STANDARDS

While it may seem imperative to focus most of our attention on improving the actual instructional or support services being provided to students with behavioral disorders, we must also remember the importance of our decision as to where to begin such instruction. How do we move to the point of truly individualizing instruction?

The goal of the chapter by Wood is to integrate the concept of assessment with program planning. As he points out, the use of assessment information must move beyond the role of eligibility determination alone. This information must be used to help us understand the student's behavior as they learn and adapt to their surroundings.

LIMITATIONS OF STANDARDS

While it is the hope of the various persons who have been involved with this project that the information contained in this volume will lead to improved services for those students identified as behaviorally disordered, we also realize that there are limitations involved with such a project.

First, while the authors have presented their ideas in what we believe to be a clear manner, the successful use of these standards is still heavily dependent upon the skills of the professional applying these concepts. Success may also be dependent upon the support services provided to a teacher by others such as school psychologists, school social workers and consultants.

These standards also assume that much of this information is not new to the teacher or direct service person. It is our expectation that teacher training programs have included much of this material in their preparation programs for teachers of the behaviorally disordered. We also hope that persons from these teacher training programs will review this document for possible needs with their individual programs. A number of teacher trainers nationally reviewed sections of the material contained here and made helpful suggestions.

A person's attitude will also be important in how these standards will be applied. Behavioral change programs appear to be a fast growth industry within our professional field. So, it does not seem that we are faced with the dilemma of a lack of training guides and materials but rather must examine some of the quality issues related to the effectiveness of such training ventures in our special programs. In addition to those concerns we have already mentioned, we need to watch our professional attitudes. Are we reacting to the need to change or expand our programs with:

1) "Functional Fixedness" - Are we going to continue to program as we have in the past because it's how we know teaching, it's how we were taught, or it's the new program we purchased over the summer?
2) "Yes . . . but" - As Eric Berne described in The Games People Play for as many ideas that we have, we are going to have reasons why the new proposed changes will not work.

As you look at the standards and proposed interventions within this volume, we hope that the opportunities for improving our programs will be evident.

This document reflects the work of many of our Iowa colleagues over an extended period of time. It is our sincere hope that the reader's use of this material will make the time spent by these dedicated

and competent professionals worthwhile.

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Chapter 2

FROM ASSESSMENT TO INTERVENTION

Frank H. Wood, Ph.D.
Professor of Special Education
University of Minnesota
Minneapolis, Minnesota

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Chapter 2

FROM ASSESSMENT TO INTERVENTION

Frank H. Wood

ASSESSMENT AND INTERVENTION

The real purpose of both assessments and interventions are to facilitate the optimal growth of human beings. Assessment procedures are used to help us better understand the behavior of students as they learn and adapt to their inner and outer environments. Intervention procedures are chosen to assist this learning and adaptation, and in some cases, to help persons unlearn or compensate for behavior that is maladaptive or preventing further growth. This manual provides information about interventions that can be used by educators and others in the helping professions to encourage optimal growth of students with special needs resulting in disturbing, disordered behavior. Often our discussions have been in terms of bureaucratic decisions regarding eligibility for service and appropriate placement. (In this chapter, placement decisions should be understood to include those related to intervention effectiveness, termination of service, and reintegration as well as initial placement.) We must not let our responsibility to manage these important bureaucratic tasks distance us too far from our recognition of the real purposes of assessments and interventions that have been mentioned.

The Uses of Assessment

Having refreshed our awareness of the broader context to what we are about, let us turn immediately to the consideration of these professional tasks. We will begin by discussing some uses of assessment.

Assessments are not carried out as an end in themselves. We assess because we intend to do something on the basis of the information gathered. But, assessments are not value free. A folk saying tells us that if we give a three-year-old a hammer, he/she will discover that everything in the world needs to be hammered. Assessments are often planned to seek information to fit preconceived notions about what should be done in a particular case. When we assess, we often see needs in terms of what we are able to do to remediate them. A teacher skilled in behavioral interventions assesses a student's special needs with an emphasis on behavior that is likely to respond to such interventions. A psychologist trained to work with family systems often finds that his/her assessment suggests that priority should be given to assisting the family to work through problems in communication and expectations. Because of their initial preconceptions about what probably needs to be done, professionals with different training and skills may emphasize very different approaches and outcomes in assessment.

The problems resulting from such differences in emphasis were addressed in Iowa Assessment Model in Behavioral Disorders: A Training Model (Wood, Smith, & Grimes, 1985). Research in Iowa had shown that while teachers, psychologists, social workers, and others concerned with educational programming for behaviorally disordered students tended to agree in theory regarding the value of types of data useful for making eligibility and placement decisions, student files were often lacking in information considered most useful and that present was of low quality (McGinnis, Kiraly, & Smith, 1984; Smith, Frank, & Snider, 1984). Negative judgments by teachers on the value of commonly collected information have also been reported (Zabel, Peterson, Smith, & White, 1982). Personal and professional priorities such as those mentioned, ease of collection, or "tradition" were apparently major determinants of the plans to assess student behavior and feelings. The goal of the training manual was to assist professionals to gather data on a broad range of student characteristics so as to make more valid and useful team decisions about eligibility and placement.

Overlapping But Differing Data Needs

It will be helpful if we recognize from the beginning a major dichotomy in the usefulness of different kinds of assessment information that results from the differences between eligibility and placement/intervention decisions. Eligibility decisions require detailed information about functioning in present situations, what can be called "status" data. The action to be taken is a "diagnosis," a detailed description of present behavior with reference made to appropriate comparison groups. A diagnosis is itself an intervention, and changes in behavior may occur from exposure to diagnostic procedures or after the feedback of diagnostic information without additional intervention being undertaken. But on the whole,

diagnoses are static while interventions are dynamic. Thus, placement/intervention decisions require information that helps decision makers make predictions about functioning in new situations: predicted responses to interventions, predicted maintenance of changed behavior, and predicted generalization of changed behavior to new situations. What will happen if such and such an intervention is implemented? Some data is useful for both these purposes; some is useful only for one.

Measurement Problems

Information for both types of decisions should be collected using the most reliable and valid measurement procedures available. This presents a problem. Test developers have found it difficult to develop highly accurate (reliable) and true (valid) measures of human behavior.[1] Questions of reliability and validity exist about the procedures used for gathering data about present status (cognitive status, socioemotional status, level of academic skill development, and level of social skill development), and the problems of measuring "traits" which continue to influence behavior over time (persisting cognitive and socioemotional traits, persisting patterns or habits of behavior) are much more serious. So, the data available for making decisions about eligibility are often flawed, but the data available for making decisions about placement tend to be even less adequate.

To understand the whys of disordered behavior well enough to predict the effects of different placements and interventions, we must have measures of thoughts and feelings as well as descriptions of observed behavior. Yet, while it is possible to obtain highly accurate records of observed behavior, as indicated by interobserver reliability coefficients of .85 or higher, the reliability of measures of thoughts and feelings are generally considerably lower, thus decreasing their ultimate validity or truthfulness as descriptions. The reasons for these lower reliabilities and the related validity problems center in the fact that we are trying to measure a constantly changing phenomenon, the growing, developing person.

In addition to the complex and difficult to measure interrelationship among behavior, thoughts, and feelings, there is an ongoing interplay between innate predispositions and external social influences, both of which have complex, contradictory, and compelling effects on people's behavior. Some behavior changes occur because of physiological maturing and experience, such as the change from an egocentric to a social perspective on behavior. Cultural, social, and linguistic factors also play a role in shaping the person from infancy on. To add to the measurement problems, assessment is itself an intervention, changing the behavior of the person assessed. We are tying to get accurate measurements of a constantly changing living being using a rubber band as a ruler—and as soon as we touch our subject, it starts wiggling.

Those who assess bring their own blend of these influences to the assessment of others. The result is a personalized distortion of what they see and hear regarding the behavior of others and their evaluations of its meaning and disturbingness or deviance. Recognizing the impossibility of taking a truly objective view, to reduce the stress caused by the dissonance, most professionals commit themselves to a chosen perspective and observe/interpret from that perspective only. Thus, the behavioral psychologist/teacher sees life from one perspective, the ecologically-oriented professional from another (McDowell, Adamson, & Wood, 1982).

Practical Implications

Because of these inherent measurement problems, all educational decisions about student behavior are actually based on probability rather than exact knowledge. We never really know for certain that a decision is the right one. We could call our decisions "best guesses", but a better word for them is "hypotheses." The latter term suggests that we will act on the basis of our best guesses and carefully monitor the effects. We are uncertain about what lies ahead, but we will be proceeding cautiously not blindly. We will compensate for our poor skill at predicting future functioning by relying more heavily on our somewhat better skill at describing present functioning. As we take each step in intervention, we will be assessing present functioning, and by adding these measurements to those already taken in the past, we will have a trend line which will help us evaluate whether the usefulness of the hypotheses on which we are acting. This is the way in which our assessments will guide our interventions.

One episode in the recent history of our national space program, the tragic loss of the Challenger and its crew, shows the difficulty in accurately predicting the results of changed situations in a field

[1]Reliability and validity are specific terms for the accuracy and truthfulness of psychological and educational measurements. Despite their importance, this is not the place for a lengthy discussion of their meaning. For such a discussion see any basic text on measurement (e.g., Ysseldyke and Salvia, 1985). Here, attention will be focused on reliability and validity issues that arise when using assessment data describing behaviorally disordered students.

where reliability and validity of measurements is much stronger than in the social sciences. Weaknesses in our data on social/emotional functioning dictate a cautious approach accompanied by much tentative checking before committing ourselves to powerful interventions. Given the complexity of what we are attempting to take in and understand, having available a broad range of information obtained through assessment as suggested in the Iowa guidelines will help improve the quality of our decisions. Requiring prior, monitored interventions in the present situation before more risky placements in other situations are made is another important application of our intention to proceed cautiously because of the limitations in our knowledge.

KINDS OF ASSESSMENT INFORMATION

Here is a list of kinds of assessment information useful in making educational decisions about behaviorally disordered students.

1. Records of continuing, periodic direct observation of student behavior (before and following changes in intervention with comparison samples of peer behavior).
2. Direct measures of academic performance.
3. Ratings of academic status.
4. Nationally normed tests of academic performance.
5. Locally normed tests of academic performance.
6. Self-reports of thoughts and feelings of student's self-assessment of personal social/emotional status and perceptions of the behavior and attitudes of others.
7. Nationally normed ratings of social/emotional status.
8. Documentation of occurrence of problem behavior in various settings.
9. Case history data documenting clinical judgment of severity and suddenness of onset of problem behavior.
10. Case history data documenting clinical judgment that the problem is not primarily the result of intellectual, sensory, health, cultural, and/or linguistic factors.
11. Case history data documenting clinical judgment that a change in label or placement is not solely for disciplinary reasons nor the result of concern about chemical abuse.

After discussing how these kinds of information can be used when making eligibility decisions, we will consider their use in making placement decisions.

USING DATA TO MAKE ELIGIBILITY DECISIONS

The focus of this chapter is primarily on the use of assessment information when making decisions about intervention and placement. However, a brief digression to review decision making where eligibility for special services is the primary concern seems warranted since the same information will also find use when making intervention and placement decisions.

Criteria and Procedures

Criteria and procedures for determining the eligibility of students for special education services because of behavioral disorders have been discussed by Smith and Grimes (1985), Gile (1985), and Wood (1985) in The Iowa Assessment Model in Behavioral Disorders: A Training Manual. Key terms emphasized in their discussion are "patterns of situationally inappropriate behavior," "deviate substantially from behavior appropriate to one's age," and "significantly interfere with the learning process, interpersonal relationships, or personal adjustment" (Gile, 1985, pp. 23-25; Smith & Grimes, 1985, p. 12). In the same manual, Wood (with Fleider & Grimes, 1985) outlines the major decision points when assessment data are used in making eligibility and placement decisions.

Key Questions in Eligibility Decisions

Here are some questions to be addressed in deciding whether or not patterns of behavior are sufficiently inappropriate, deviant from age expectancies, and interfering with the normal learning process, interpersonal relationships, and personal adjustment to warrant a change in placement. (Note that these same questions, substituting terms such as "appropriate," "typical," and "not interfering," may be used to answer questions about readiness to return from a special setting to the regular school program.)

1. What changes have been noted in the student's problem condition following two different planned interventions in the present setting?

2. What evidence is available to show significantly discrepant (below norms) academic progress by the student?

3. What evidence is available to show that the problem behavior interferes with the student's social/emotional growth?

4. What evidence is available to show that the student's problem behavior interferes with the academic or social/emotional growth of other students?

5. What evidence is available to indicate that the condition is pervasive and chronic or acute?

6. Does the available evidence enable the ruling out of intellectual, sensory, health, cultural, and linguistic factors as primary contributors to the problem behavior?

7. Is it clear that the assignment is being made for the educational benefit of the student (or peer group) rather than for disciplinary reasons or because of chemical abuse?

Information Necessary to Answer Eligibility Questions

What kinds of data are needed to answer these questions? Some suggestions follow. Primary sources of data are given first followed by secondary or supplemental sources in parenthesis.

1. To determine lack of change following interventions, use direct observations of problem behavior before and during the interventions and comparison observations of peer behavior. (Normed ratings of social/emotional status.)

2. To determine discrepant academic achievement, use direct measures of student performance, teacher ratings of academic status relative to peer group (including course grades), scores on nationally normed tests of achievement, or scores on locally normed tests of achievement.

3. To determine interference with social/emotional growth, use direct observation, self-report measures of thoughts and feelings, and nationally or locally normed ratings of social/emotional status.

4. Interference with the academic and social/emotional growth of other students is best shown by observation data and scores on tests of achievement or periodic quizzes. (Student self-reports provide supplementary information.)

5. Evidence that a condition is pervasive and chronic or acute can be sought through documentation of the occurrence of the behavior in more than one setting, a case history or log of student behavior, and the clinical judgment of licensed, trained professionals. ((Observation data is useful as supplementary information.)

6. and 7. Evidence that the condition is not the result of other factors is usually a matter of clinical judgment based on case history together with appropriate medical or psychological test information.

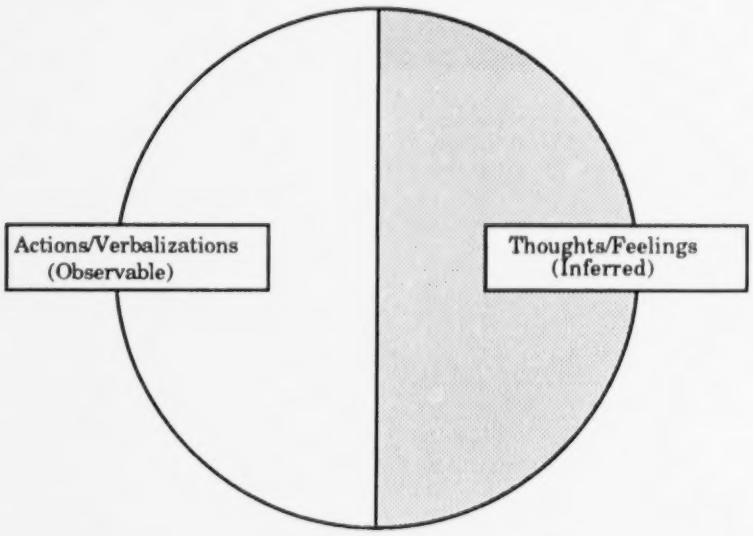
A WORKSHEET FOR ORGANIZING ASSESSMENT INFORMATION

As we proceed to gather information about student traits and status in pursuit of the elusive completely adequate assessment, we may begin to feel overwhelmed by the sheer mass of discrete data accumulating in the file. How can we organize this data so they will be useful as we answer eligibility and placement questions? In this section, a worksheet on which we can enter bits of data in their presumed functional relationships will be presented. Sorted into the six areas of the worksheet, relationships among items of information may be more easily recognized as we seek to understand present student status (eligibility decisions) and to predict the effects of alternative placements and interventions. The worksheet does not substitute for measures of change over time obtained by serial observation or testing, but it provides a format in which that and other information can be organized as we consider the next step to be taken.

Major Dimensions

Three major dimensions of the model provide the major categories for organizing information. One dimension is based on a hypothesized relationship between observed behavior (actions and verbalizations) and accompanying but hidden thoughts and feelings (figure 1). Educators who have chosen to be guided by the model of human behavior suggested by behavioral psychologists may choose to emphasize observed behavior. Those who prefer a more dynamic model may emphasize thoughts and feelings. Both areas have been selected as the primary or sole target for assessment and intervention by some theorists. Educators who wish to vary their approach depending on the characteristics of an individual student may change back and forth from one approach to the other or prefer a combination of both.

Figure 1



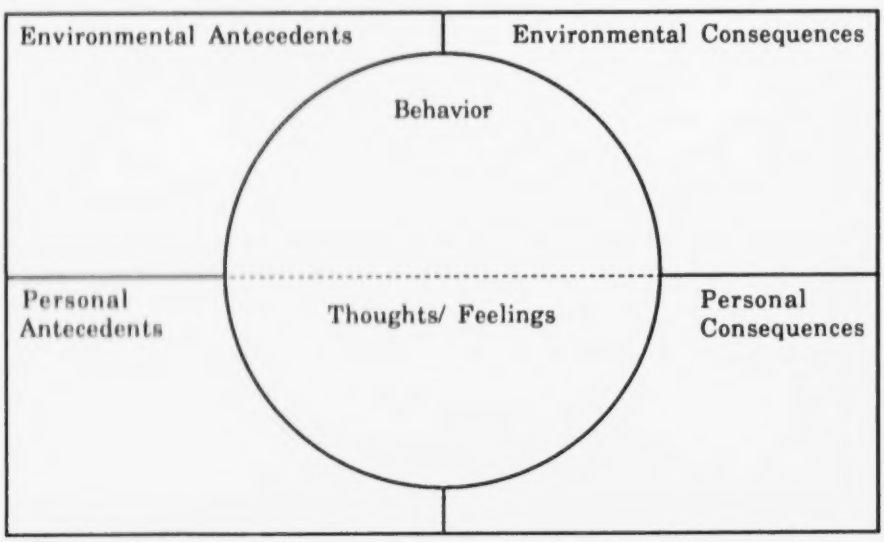
A second dimension of the worksheet assumes a relationship between events preceding and following observed behavior with its accompanying inferred thoughts and feelings. Preceding events are called antecedents and following events are called consequences, indicating an assumption that they are temporally if not causally related to the observed behavior (figure 2).

Figure 2

Antecedents--------Behavior--------Consequences

Finally, a third major dimension provides for the categorization of information primarily on the basis of whether it was obtained through direct observation or inference. These dimensions are also labeled the environmental and personal dimensions. Directly observable data includes descriptions of behavior and antecedent or consequent events in the physical and social environment of the individual student whose behavior, thoughts, and feelings are the focus of attention. Inferred information is obtained indirectly by hypothesizing from data obtained through direct observation including responses of the student to procedures intended to provide information about level of intelligence, achievement, selfconcept, or motivation. Some of the data recorded in the environmental sectors of the worksheet is the result of inference rather than direct observation of environmental events, particularly that descriptive of teacher, peer, and parental attitudes. Likewise, some data recorded as personal is actually based on direct observations of student functioning, for example, measures of that individual's sensory acuity and physical health. The resulting "contamination" of the categories does not destroy the usefulness of the worksheet, as its application to a specific case should demonstrate. The worksheet format with the arrangement of the six categories is shown in Figure 3.

Figure 3



Behavior and Its Context

The user of the analysis/planning worksheet begins by describing as objectively as possible the behavior being considered and related thoughts and feelings.

Observable Behavior Being Analyzed. Choice of a more specific behavior, e.g., "shouting out during discussion periods," permit a more focused examination of related factors than if a general class of behavior, e.g., "aggressiveness directed toward peers and teachers," is chosen. Observable behavior includes both verbalizations and actions. When possible, these should be described with data on their frequency,

persistence, and intensity.

Related Thoughts and Feelings. Note the importance of the distinction made between verbalizations and the thoughts and feelings associated with this behavior. Sensitive observers often note differences between verbal reports of subjective thoughts and feelings and the information provided by nonverbal actions such as posture and expression. Characteristics of thoughts and feelings like frequency, persistence, and intensity must be inferred from self-reports and actions accompanying or following the behavior analyzed.

Environmental Antecedents. This cell of the analysis/planning sheet is used for recording observed characteristics of the environment in which the behavior is observed to occur. Information is organized to answer the general questions or who, what, where, and when. "Who" factors include the persons present, roles modeled, group size, and group history. "What" factors include the activity, whether it is regarded by those participating as a task (low frequency of participation without external consequences) or a game (high frequency of participation without external consequences), curriculum, and standards by which participation is evaluated (how much, how long, how well). "Where" factors include place characteristics such as building layout, furnishings, lighting, and inside and outside temperature, air pressure, and humidity. "When" factors include the time of day and the place on any established schedule of activities. These four factors are often combined in a single bit of information, e.g., "According to the student's mother, his father beats him and other members of the family severely when he has been drinking" or "The student's desk is one of a cluster of six placed near the classroom door."

Personal Antecedents. Background information about the student permits inferences about these factors. Learner responsiveness is inferred from observations and indirect measures of physical, sensory, and cognitive functioning. Status measures of achievement or intelligence obtained from standardized or curriculum based procedures provide estimates of learning and level of development. General measures of attitudes and "self-concept" also permit estimates of this aspect of learner responsiveness in a specific situation.

Learner beliefs about competence and probability of success at important tasks is also noted in the personal antecedents sector of the worksheet. Expectancy of competence is the expectancy that one will be able to perform at a certain skill level. Expectancy of success is the expectancy that performance at one's level of competence will lead to successful achievement. Expectancies of competence and success are inferred from self-reports checked against observations of performance in the same or similar situations. For example, a student may not believe that her level of reading competence is sufficient to enable her to complete the assignment given her successfully.

Learner motivation must be considered separately from learner expectations regarding competence of performance. Expectation of failure may undermine willingness to perform despite desire for the reward available to those who perform successfully. Hypotheses about motivation are inferred from the same kind of data on which inferences about expectancies are based.

A final type of information to record in the personal antecedents sector is our inferences about learner long range goals or "chosen role". Older students frequently behave in accordance with a chosen set of goals or role. Younger students may have been shaped by life experiences into patterns of behavior that show a similar consistency across situations despite being less consciously adopted. A variety of positively or negatively oriented deviant or alienated roles influence the behavior of behaviorally disordered students. Teachers need to become aware of distinctions between such patterns as "happy" and "black" punk roles, loner and gage member roles, and "experimenter" and chemically dependent drug or alcohol user roles. Efforts to behave in a manner consistent with a chose role by students seeking peer approval may lead to stereotypic responses to authority or events arousing anxiety or fear, causing them to ignore or override dissonant expectancies and motives.

Environmental Consequences. The focus here is on changes occurring in the who, what, where, and when factors discussed under environmental antecedents which follow the behavior of interest. An important consideration is whether such consequences appear to be reinforcing or punishing. In determining this, it is important to compare verbalized evaluations of consequences with effects on the behavior observed. Reinforcing consequences lead to increases in the frequency, persistence, or intensity of the behavior of interest, while punishing consequences lead to decreases.

Personal Consequences. Where differences are found in the rewarding/ punishing results of consequences in terms of their observed effects on a student and the student's reports of how they are experienced, we may expect that covert personal consequences are being managed in ways that conflict with the intent of those applying environmental consequences. Thus, "punishing" consequences may be interpreted

as "deserved" or even rewarding by some students and vice versa. A student who has experienced physical or sexual abuse may show increases in rates and intensity of inappropriate behavior when aversive procedures are applied while still reporting them to be painful. A youthful gang member may reject rewards because accepting them is disapproved by the gang.

ANALYSIS OF A CASE

Analyzing problem behavior in a search for understanding that will facilitate appropriate intervention and placement is in many ways a creative process in which we apply knowledge, skills, and personal experience that goes beyond the data itself. The use of the worksheet for organizing information about a student's behavior disorder will be demonstrated using material from the case study of Mary, a nine-year-old girl (based on material from Rhodes, 1975). As we review the case study, we jot down what we feel to be the most significant descriptions of Mary's behavior, thoughts, and feelings and related events on a prepared worksheet form or scratch sheet organized as shown in Figure 3. (For purposes of this discussion the data as available in this case study will be presented without judgments about its quality or sufficiency.)

UNDERSTANDING MARY'S BEHAVIOR

The Analysis

Behavior, Thoughts, and Feelings. Mary's teacher has sought assistance in managing her tantrums and "oppositional behavior." These are said to have occurred in 50 percent of the half hour intervals during a one-week observation period. The oppositional behavior appears to be linked to Mary's inability or refusal to complete her assignments which is also reported to be a problem. The adults who have observed Mary believe feelings of frustration, anger, and bad feelings about herself may accompany this behavior. (In this example, the stress is placed on "problem" behavior and related factors. In actual use, an effort should be made to record areas of strength as well as weakness. A separate copy of the worksheet can be used for this purpose if necessary.)

Environmental Antecedents. The problem behavior occurs both at school and at home. At school, it occurs mainly in the classroom, and observation data shows higher frequencies during the first study period (reading), at lunch time, and during the math period. The physical arrangement of the classroom and Mary's place in it do not appear to be related to the behavior. However, there is the possibility that Mary is being assigned reading and spelling work beyond her actual or selfperceived level of competence. Mary's parents were killed one year ago in an automobile accident. It is possible that the stress of adjusting to this loss may be contributing to the present behavior problem. She currently lives with her grandmother who is perceived by school personnel as supportive but having difficulty in managing Mary's behavior at home. The grandmother has health problems and limited financial resources.

Personal Antecedents. Screening tests indicate no problems with Mary's vision, hearing, or speech. There appear to be no physical reasons for some of her present developmentally immature physical behavior. Mary has no memory problems and is capable of good attention. She scored in the low normal range on an individual test of intelligence. Her teacher describes her as "motivated but unable to do the work." Her arithmetic scores are at grade level, but she is below expected level of achievement in reading and spelling. Mary is not able to verbalize the present contingencies that she believes affect her behavior, but she does express a desire "not to throw fits." (Note the limitations on self-report data resulting from Mary's developmental level.)

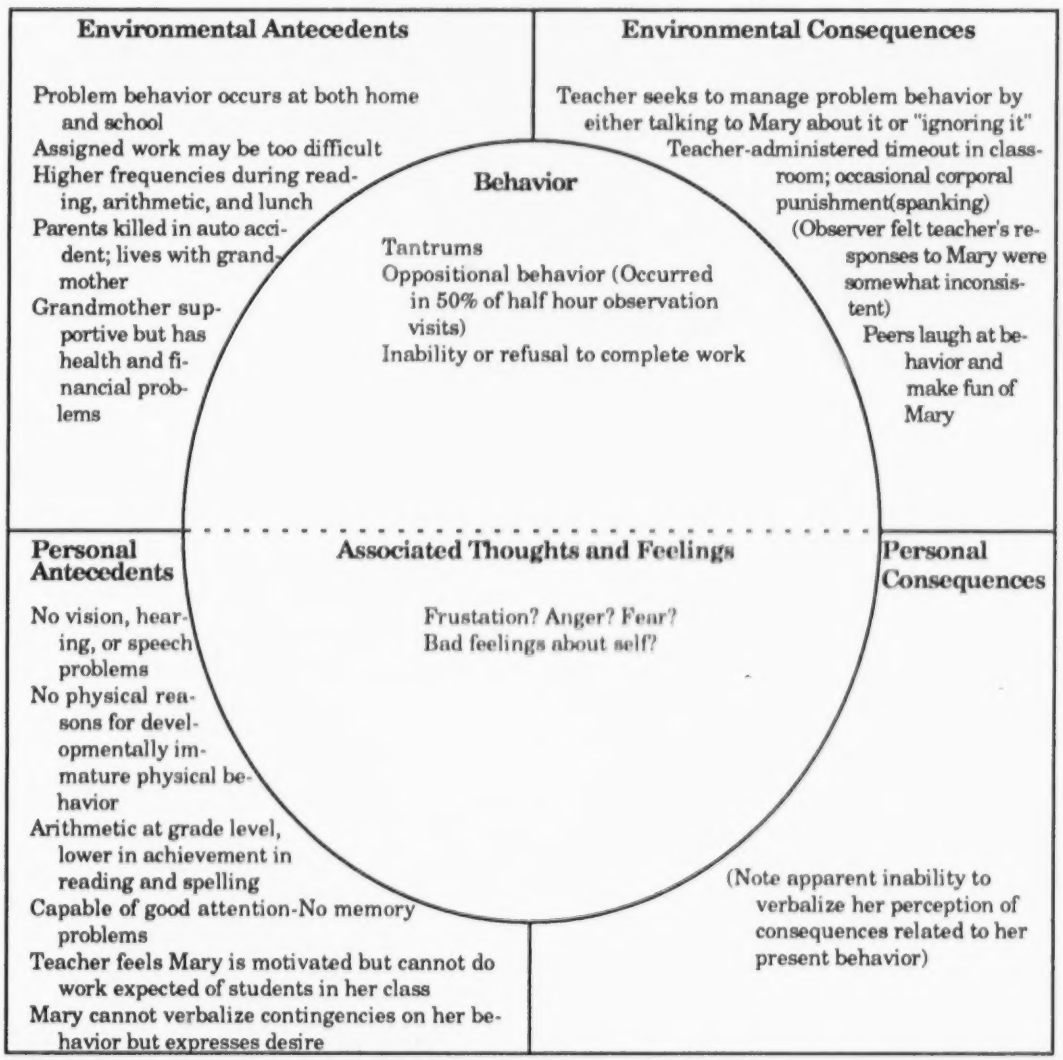
Environmental Consequences. The teacher has been trying to manage Mary's oppositional behavior by talking with her about it and "ignoring" it. She occasionally uses time out in a corner of the classroom or spanking as punishments. The classroom observer felt that the teacher's responses to Mary's behavior were inconsistent. Mary's peers laugh at her behavior and make fun of her. (Note that the present antecedents and consequences seem to be maintaining Mary's disapproved behavior.)

Personal Consequences. Mary's inability to verbalize the contingencies presently related to her behavior has already been noted. Her limited ability to provide self-report information means there is little on which to base inferences regarding her understanding of and attitudes toward the consequences others apply to her behavior.

The Overall Picture

Figure 4 is a completed analysis/planning worksheet which shows the overall pattern relating Mary's behavior to selected contingent events. Review of the worksheet suggests several factors that may be contributing to Mary's problem behavior. She has experienced considerable stress in her personal life during the past year. The level of difficulty of some of the assignments given her may be too high. The teacher's management of the problem seems to stress punishing rather than rewarding interventions and may be inconsistent as well. Mary's peers may be both provoking and reinforcing her immature behavior. Because of Mary's cognitive immaturity, data on her thoughts, feelings, and motivation are based more on inferences made from observed behavior than self-report.

Figure 4


Environmental Antecedents
Problem behavior occurs at both home and school
Assigned work may be too difficult
Higher frequencies during reading, arithmetic, and lunch
Parents killed in auto accident; lives with grandmother
Grandmother supportive but has health and financial problems
Environmental Consequences
Teacher seeks to manage problem behavior by either talking to Mary about it or "ignoring it"
Teacher-administered timeout in classroom; occasional corporal punishment(spanking)
(Observer felt teacher's responses to Mary were somewhat inconsistent)
Peers laugh at behavior and make fun of Mary
Behavior
Tantrums
Oppositional behavior (Occurred in 50% of half hour observation visits)
Inability or refusal to complete work
Associated Thoughts and Feelings
Frustation? Anger? Fear?
Bad feelings about self?
Personal Antecedents
No vision, hearing, or speech problems
No physical reasons for developmentally immature physical behavior
Arithmetic at grade level, lower in achievement in reading and spelling
Capable of good attention-No memory problems
Teacher feels Mary is motivated but cannot do work expected of students in her class
Mary cannot verbalize contingencies on her behavior but expresses desire
Personal Consequences
(Note apparent inability to verbalize her perception of consequences related to her present behavior)

FROM ANALYSIS TO PLAN FOR INTERVENTION/PLACEMENT

A System's Perspective on Intervention

Frequently a number of nonschool factors are listed in the environmental antecedents and consequences of the analysis/planning worksheet. These include parent behavior and expressed attitudes, and sometimes, broader community factors such as welfare system practice or police and court interventions. Educators must decide which of the various factors that are hypothesized to have some relationship to the student's behavior are available for direct influence by a person in their particular professional role. For example, a teacher can make changes in curriculum content and methods and directly reward on task behavior while the school social worker cannot do so. On the other hand, the school social worker can work for change within the family system more easily than the teacher. An administrator can change building policy and a school psychologist can provide individual therapeutic counseling, tasks that do not ordinarily fall under the teacher's direct control. Because the coverage in this chapter must be limited, the discussion of intervention strategies which follows will stress those which are usually included in the teacher's defined role, those which can be implemented with individual students in small groups or in the classroom as a whole. Intervention in other systems, which may be of equal or greater importance in some cases, will not be discussed.

In general, our influence over the details of daily functioning in a particular social system is much greater in a small system like the classroom than in a larger system like the school as a whole or the community. Thus, within his/her classroom, the teacher usually has greater direct influence than does the principal in the building as a whole.

The Interrelationship Between Developmental Level and Choice of Intervention Strategy

Data on the analysis/planning worksheet will provide us with indicators of student developmental level. Developmental level and appropriate intervention strategy are closely related. Consistent with our broad goal of facilitating the overall growth of the student, we should seek to move from strategies designed for effectiveness in managing impulse-driven behavior to those appropriate for developing capacity for self-control and the ability to choose among alternative responses. In general, developmentally younger students respond best to more structured interventions than are needed by developmentally more mature students. Developmentally mature students need intervention strategies that will assist them to develop the self-management skills they well need to function as adults. But, development is complex. Lacking the ability to make appropriate choices in the classroom, an eight-year-old and a fifteen-year-old may both be best supported by structured intervention approaches such as those using direct rewards. However, while the younger student may value such objects as balloons and balls as rewards, the older student may reject such "kid stuff" and prefer to listen to a favorite rock star or have ten minutes free time. Other examples will be provided later in the discussion of interventions.

The Critical Importance of Reward

Rewarding consequences maintain the student behavior they follow at its present level or cause it to increase in frequency or intensity, or both. Punishing consequences cause student behavior to decrease in frequency or intensity. Intervention programs can be planned to emphasize either rewarding (reinforcing) or punishing consequences. We should plan to emphasize rewarding consequences as the basis for maintaining and changing student behavior because we wish the student's experiences in school to be positive. Classes in which the level of reinforcing teacher comments falls below 80 percent are associated with negative student feelings (Jones, 1981, p. 27, 263). Where a choice of consequences can be made, choose the positive. If punishing consequences must be applied, see that they are offset with plenty of positive experiences.

Intervention Strategies and Placement Decisions

Intervention consists in the planful use of strategies to reward behavior we like so that it will be enhanced, or at least maintained, and to punish behavior we do not like so it will be less apt to continue to occur. Intervention is intended to influence people to behave differently from the way they behave now. Students should be placed in the least restrictive environment in which it will be possible to implement the intervention we have chosen as most likely to bring about a desired change in behavior (our "cautious hypothesis"). Response to interventions and behavior status should be monitored continually so as to decide whether or not the present placement is appropriate or that a change of intervention or placement is indicated.

Termination of special placement and reintegration into less restrictive settings should always be goals.

INTERVENTION STRATEGIES

Detailed discussions of intervention strategies are presented in the other chapters of this manual. The discussion here will focus on general issues. To begin, there are three general clusters of intervention strategies: (1) Curriculum strategies, (2) Instructional strategies, and (3) Behavior management strategies. While these strategy clusters overlap to some extent, the emphasis of each is different. Curriculum strategies require exercise of teacher skill in the choice of content and the organization of content for presentation. Instructional strategies such as those advocated by Hunter and her associates (1976, 1981) focus on that part of the teaching act that concerns the presentation of academic materials to students so a to facilitate the learning of content. Behavior management strategies might easily be subsumed under the two clusters already mentioned, but they will be separated here for special attention and actually further subdivided as general intervention plans and reactive intervention strategies.

General Intervention Plans

The intervention strategies of which general intervention plans are composed are implemented to make the occurrence of appropriate student behavior likely and to decrease the probability that student will behave inappropriately. Teachers apply such strategies to elicit and reward appropriate student behavior. Since the student does not always know how to behave so as to meet teacher expectations, general intervention plans include strategies for teaching new social behavior and methods for recognizing and managing emotional responses to situations. These strategie will not be entirely successful unless both curriculum and instructional strategies are well chosen and implemented.

A variety of general intervention plans have been suggested to teachers. Emmer and Evertson and their colleagues from the Texas Effective Teacher Project (1984) have provided excellent outlines of a comprehensive general plan for organizing a regular classroom at the elementary or secondary levels. An example of a general management plan which focuses especially on student behavior in the regular classroom is "assertive discipline," as advocated by Canter and associates (1979). Hewett (1968, 1980) presented a description of a general management plan called the "engineered classroom" that has been successfully implemented by many special education teachers and in some regular classrooms as well. Mary Margaret Wood and her colleagues have developed a general intervention strategy that takes student developmental level into consideration (1982, 1986). An overall behavioral approach to classroom management has been well described by Kerr and Nelson (1983). Other examples applied in both regular and special settings, some focused on the individual classroom groups and others on the entire school, include Cooperative Learning (Johnson & Johnson, 1975a, 1975b), Social literacy Training (Alschuler, 1980), Positive Peer Culture (Vorrath & Brendtro, 1974), and the Systematic Management Plan for School Discipline (Duke & Meckel, 1984). Many teachers have also developed their own general intervention plans.

All "proprietary," that is to say, copyrighted general intervention plans, are put together from intervention "building block" components such as those described in the other chapters of the manual. Some of these components have themselves been "packaged" attractively and given proprietary names by their authors. Some of these intervention components are shown in the accompanying figure where they are also related to the developmental level of the students with whom they will be used (figure 5). The concept illustrated in this figure has been developed in much greater detail by Sodac and McGinnis in Figure 1 of Chapter 3.

General management strategies are planned and set in place as preventative procedures. They are chosen to match the behavior management requirements of the majority of the students we expect to be present in our classroom. From the viewpoint of those planning educational placements, the match between general management strategy and the needs of the student being placed is critical since the characteristics of the general management strategy already in place limit the amount of individualization possible to adapt further to the needs of specific students. For example, it is difficult to integrate interventions that stress student self-management in an environment dominated by a general management strategy that stresses external control.

Figure 5

Management Intervention Strategies
Arranged by Developmental Level

GOAL	LEVEL OF COGNITIVE-EMOTIONAL GROWTH
DEVELOPING INTERNALLY MONITORED CONTROL [CHOICE]	HIGH
PROBLEM-SOLVING PROCEDURES	
[SUSPENSION AND EXCLUSION]	
SELF-MANAGEMENT OF BEHAVIOR	
SOCIAL SKILLS TRAINING	
COGNITIVE BEHAVIOR MANAGEMENT	
LEVELS, CODES, OR STEP SYSTEM	
GROUP CONTINGENCY PROCEDURES	
BEHAVIOR CONTRACTING	
[TIMEOUT AND SECLUSION TIMEOUT]	
TOKEN ECONOMY	
DIRECT REWARD	
ENVIRONMENTAL CONTROL [HABIT]	LOW

Reactive Intervention Strategies

Individualization within the constraints set by a chosen general management strategy is achieved through skillful teacher use of reactive intervention strategies. Reactive intervention strategies have two purposes. They shortstop the problems that arise in spite of a sound general management strategy, dealing with crisis situations by containing disapproved behavior and directing the student back to appropriate learning behavior as soon as possible. They also serve a constructive teaching function if they are chosen to match the developmental level and special needs of the individual student. Appendix A includes a list of a number of reactive intervention strategies. Reactive intervention strategies are grouped on the list as environmental, cognitive-emotional, and administrative. Environmental interventions are direct interventions, those which assume that a change in the classroom environment will have a direct impact on the individual student. Verbal-cognitive interventions are less direct, requiring that the student process observed events cognitively for meaning, including teacher verbal comments, and then apply them to his/her own situation. Many of these interventions assume a higher level of cognitive functioning than seems to be required by the more direct environmental intervention strategies. The lst group of reactive intervention strategies are those labeled administrative. These strategies are characterized by a change

in the agent who manages the intervention strategy. When they are applied, the student is referred to another agent, the parent, the principal, or a police officer, who takes responsibility for completing the intervention. This agent may choose to apply the intervention in a manner different from that intended by the referring teacher.

Within each cluster, interventions have been classified as strong or weak, partly on the basis of previous research on aversiveness of interventions as perceived by teachers, and each intervention has been further tagged as behavior enhancing, behavior suppressing, or neutral in accordance with its most typical effects. Tagged interventions are grouped and ordered in terms of aversiveness as perceived by teachers. The effect may vary for individual students, of course, and changes in behavior must always be monitored.

Matching Teacher, Intervention, and Student

Teachers do not always take advantage of the opportunities for individualization presented by the variety of possible reactive intervention strategies, using a fixed set of interventions with all students. When a static approach is taken, the effects are usually not different from those resulting from the application of a single general management strategy. If the match of a fixed approach with an individual student is good, the effect will be good, but the poorer the match, the poorer the result. Flexible use of reactive intervention strategies, applying them selectively with individual students, should enable us to improve the number of good matches and good outcomes.

Knowing when and how to apply a wide range of intervention strategies is an essential skill of the good teacher. If a teacher with this skill is not available, the decision making team is unlikely to make a successful placement. On the other hand, those making placement decisions must accept the limitations of the real world, one of which is that no single teacher will be skilled in the use of all intervention strategies. Decision makers should not waste the skills of good teachers by placing students who do not match their strengths in their classrooms if they can avoid it. The real challenge is to match the individual student with the best available placement. The next section includes a more systematic discussion of this and related issues and concludes with an application of the points made to the case of the student whose behavior was previously analyzed.

KEY QUESTIONS FOR INTERVENTION/PLACEMENT DECISION MAKING

What constitutes an appropriate intervention in the least restrictive placement? When should the present placement be changed? When should special services be terminated? Will reintegration be successful for this student? These are some questions that must be addressed when making such decisions. It is assumed that parents as well as teachers, and when appropriate, students themselves, will be involved in answering these questions. This stage is built on the previous stage of analysis.

1. Given a variety of student problem behaviors, what are our priorities for change?
2. What has been the student response to prior interventions? Do we have information that will help us predict responsiveness to changes produced by future interventions, perhaps in alternative settings?
3. What is the range of interventions that can be applied in the current settings? In available alternative settings?
4. What are priorities for the use of interventions? Are any interventions to be ruled out for special reasons?
5. Where is the least restrictive setting in which the high priority intervention(s) can be applied?

Information Needed to Answer Intervention/Placement Questions

The information needed to answer intervention/placement questions overlaps with that needed to answer eligibility questions, but there are also important additions. The first seven types of information from the earlier list of typically gathered assessment information will be useful here also, but use will also be made of information that must be contributed by those professionals, parents, and students, involved in the decision making. Here is a list of information related to answering the five questions.

1. Descriptions and ratings of present behavior status with attention to positive as well as negative aspects, and long- and shortrange goals for student behavior set by parents, teachers, and students.
2. Descriptions and ratings of present behavior status, changes in behavior following previous interventions and data about developmental level and "trait" characteristics assumed to have a continuing influence on behavior across settings.
3. Lists of interventions by setting. (This information may not have been gathered for alternative settings during assessment to determine eligibility.)

4. Within the boundaries set by law and ethical standards, this information must be supplied by educators and parents. Priorities among possible interventions will need to be negotiated among the parties involved in the planning.

5. This requires use of the same information collected to answer question 3. However, to answer this question, that information must be considered in the light of the priorities set in answering question 4.

Most states do not require that the additional information needed for making intervention/placement decisions be available in a written format as part of the student file. Participants in the planning conference bring most of this information to the conference "in their head," and the final Individualized Education Plan or other document summarizing the plan reflects rather than includes it. As a result, this information is typically of unknown, though undoubtedly varying, reliability and validity.

How can the analysis/planning worksheet help us when we are planning appropriate changes in intervention and placement? The same organizational format can be used to help us organize our notes when planning the management of Mary's problem behavior.

PLANNING INTERVENTIONS FOR MARY

Environmental Contingencies

With two copies of the worksheet in front of us, one showing the completed analysis of Mary's behavior and the other for taking notes about intervention possibilities, we begin by looking for environmental contingencies that are under the school's control. While Mary's problem behavior is reported to occur both at home and at school, we cannot base our program for intervention on changes to be made at home. This is a good general rule, and in Mary's case, while her grandmother wishes to support the school in its efforts, her limited energy and resources will not permit her to be a major change agent. Likely environmental contingencies for change include the teacher and peer responses to incidents of problem behavior, level of difficulty of some assignments (with supplementary tutoring as an additional intervention possibility), and more careful examination of the relationship between incidents of problem behavior and time of day. There are enough possibilities for change here to cause us to rule out immediate placement of Mary as a "behaviorally disordered" student, although the disturbing effect of her behavior on the classroom learning environment has made that a possibility even if we still lack enough evidence to decide whether this is a chronic, acute problem behavior rather than a short-term reaction to the death of her parents and difficulties with keeping up with the class' level of achievement.

Mary's teacher can be coached on consistent procedures for rewarding Mary when she behaves appropriately and withholding reinforcement when she acts out. Ignoring does not seem to be working well with Mary, so more direct environmental interventions seem to be needed. The teacher can also be encouraged to make modifications in Mary's assignments to see if this will increase her rate of successful completion. Supplementary tutoring would be helpful, and it should be made available without labeling Mary as a special student if this is possible since at this point it is important not to overreact to what may be a temporary problem. We can try to enlist the cooperation of the peer group by verbal appeals, which may be understood well enough by peer group leaders to enable them to influence the rest of the class, perhaps supporting their cooperation by use of group rewards contingent on Mary's appropriate behavior. Mary's grandmother can be involved by seeking her approval for the planned changes and providing her with daily reports of Mary's positive accomplishments so that she can reinforce such behavior at home. (Of course, full participation by the grandmother in making and approving the intervention plan would be required if Mary were to be considered for eligibility for special education services.)

Personal Contingencies

The possibilities for using information about personal antecedents and consequences as a basis for planning intervention strategies are more limited in this case. Studying the analysis sheet shows us that some of the information collected on student status and traits is useful primarily in ruling out alternative hypotheses about the causes of the problem behavior. It is important to know that the problem is not associated with severe health or cognitive deficiencies. The evidence that Mary cannot verbalize what the contingencies are which affect her own behavior, e.g., she has a limited sense of a relationship between her "mis" behavior and subsequent punishment by the teacher, suggests that talking to her about her behavior, while appropriate if not overdone, is unlikely to produce immediate changes in that behavior. However, Mary's self-report that she does not like "to throw fits" indicates some motivation to change.

Overall, there is evidence to support reliance at the present time on immediate, direct environmental consequences for Mary's behavior with an emphasis on the rewarding of appropriate behavior.

Summary

The case chosen to introduce the use of this analysis/planning worksheet is a relatively simple one. It demonstrates how this analysis can help us organize the data available to us each time it is necessary to analyze student status or progress under the present intervention plan and develop changes that may improve the effectiveness of that plan. As the data sources become more numerous and varied, a relatively simple, flexible plan for organizing them becomes more important. As students mature cognitively and become better able to monitor and assume responsibility for their own behavior, the usefulness of personal contingency data for purposes of intervention becomes more important. The environmental changes that seem likely to influence Mary's behavior, and which proved successful in the actual case from which this example was adapted, may not be effective with older students who are organizing their inner resources to resist them in favor of self-rewards or rewards not under control of school personnel. In such cases, the clarity of the overall picture which the worksheet helps us develop is useful in helping us understand the relative effectiveness or ineffectiveness of the interventions available for use.

TOWARD A MORE COMPREHENSIVE VIEW OF BEHAVIOR AND ITS CONTINGENCIES

The analysis/planning worksheet helps us to organize assessment information so as to better understand the complex interrelationships among environmental (objective) and personal (subjective) events which influence an individual student's behavior. We are then better prepared to make necessary professional judgments about which events should be altered to produce desirable change in student behavior. But the worksheet format does not give us those answers. We must decide the answers to important questions such as the following:

1. Is our assessment complete, or is important information about personal and environmental contingencies lacking?
2. Are the causes of the behavior disorder primarily external to the student (environmental) rather than internal (personal)? (The answer to this question will help us decide whether the label "behaviorally disordered" is appropriate.)
3. Are there still options for change in the present educational placement, or are major changes in the student's environment needed to produce desired behavior changes, e.g., placement in a special classroom or residential setting?
4. When the student has begun to make satisfactory progress, what are the factors that appear to be supporting that progress? If progress is not satisfactory, what options exist for change?
5. Are the factors supporting stable satisfactory progress in the present situation present in a less restrictive setting to which we wish to move the student? What aspects of the program should be given attention if we wish the student's behavior to generalize to new situations?

To be able to answer these questions, we must develop our professional knowledge and skills through continuing study and practice. Here are some suggestions that may assist in professional self-development.

Alternative Explanations of Problem Behavior

Successful use of the analysis/planning worksheet depends on more than the reliability and validity of the assessment information available to us. We must also be knowledgeable abut the variety of possible explanations for the patterns we observe in the arranged data. To refresh our understanding of the characteristics of other handicapping conditions, we will find it useful occasionally to review a recent survey text on exceptionality in school-aged children. For better understanding of issues related specifically to behavior disorders, review of a text about behavior disorders written with the needs of educators in mind, such as Kauffman (1985) or Cullinan, Epstein, and Lloyd (1983), will be helpful.

To develop your own conceptual model of behavior disorders, you may find it helpful to read the discussions of the behavioral, psychoeducational, ecological, and social learning approaches to analysis and intervention in McDowell, Adamson, and Wood (1982). Morse (1985) has also recently authored a thoughtful discussion of issues in the education and treatment of behaviorally disordered children and youth. Many stimulating articles appear in professional journals and monographs such as Behavioral Disorders, Exceptional Children, American Journal of Orthopsychiatry, and the Monograph in Severe Behavioral Disorders series published by the Council for Children with Behavioral Disorders and available from the Council for Exceptional Children in Reston, Virginia. For example, the 1985 issue of the Behavioral

Disorders monograph contains an article by Hewett on person-environment fit in which he explores more thoroughly some of the assumptions underlying the interaction of personal and environmental factors on which the format of the analysis/planning worksheet is based.

The important idea to keep fresh is that all explanations of the relationships between behavior, thoughts, and feelings and environmental or personal events are hypotheses rather than facts. Keeping up with the literature of our field is one good way to remain professionally alive and growing.

CONCLUDING COMMENTS

The burden of many professional responsibilities should not blind us to the fact that using assessment data to make decisions about the education of students with behavior and learning problems is an intellectually challenging and exciting task. The questions raised in this chapter, and the analysis/planning worksheet which has been introduced as a means for organizing the information available to us for answering them, are intended to help free us up to use our knowledge and skills as creatively as possible in professional decision making.

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APPENDIX

REACTIVE INTERVENTION STRATEGIES

+ Usually behavior enhancing, "rewarding."
0 May be neutral, behavior enhancing or behavior suppressing.
- Usually behavior suppressing, "punishing."

Mild Environmental Interventions (ME):

[Direct interventions, change in environment has direct impact on student.]

+ Reinforce group for student's appropriate behavior (group contingent reinforcement).
+ Reinforce student with materials, tokens, points, etc. for behaving as desired.
+ Provide physical outlets/tension release activities for student.
+ Touch student with positive intent.
+ Change task assigned to student.

0 Change classroom physical environment of student by moving chairs, table, screens, etc.
0 Change student's place in classroom.
0 Permit problem behavior to continue without responding (planned ignoring).

- Move closer to student whose behavior is disturbing (proximity control).

Strong Environmental Interventions (SE):

- Take away objects, materials, owned or in use by student.
- Paddle or switch student on buttocks or legs.
- Require student to do timeout in special isolation room.
- Vigorously shake student or tightly squeeze flesh (arm, ear, etc.).
- Require student to do timeout at special timeout area in the classroom.
- Take away previously given material reinforcement, tokens, or points (response cost).
- Physically restrain, push, or hold student firmly.
- Require student to do timeout at present place.

Mild Verbal/Cognitive Interventions (MV):

[Indirect interventions, require student to process observed events cognitively for meaning and then apply to own situation.]

+ Promise reward for desired behavior.
+ Model desired behavior for student.
+ Praise student for appropriate behavior.
+ Verbally praise behavior of another student who is behaving as desired.
+ Verbally encourage desired behavior ('pep talk').
+ Develop written contract with student specifying goals and rewards for appropriate behavior.
+ Verbally cue, prompt, or redirect student behavior.
+ Reinforce another student(s) who is behaving as desired with materials, tokens, or points.
+ Ease tension by verbal humor.

0 Verbally call attention to previously discussed rules, objectives, or expectations.
0 Verbally recognize negative feelings inferred from observing student's behavior.
0 Conduct group meeting to discuss alternatives for problem behavior.
0 Verbally counsel or discuss problem behavior with student(s) (life space interview).

- Using gesture or verbal alert, signal student to stop disturbing behavior.

Strong Verbal/Cognitive Interventions (SV):

- Verbally reprimand or criticize student's problem behavior.
- Verbally threaten student with punishing consequences.

Mild Administrative Interventions (MA):

[Student is referred to another agent who administers consequences.]

- Involve parents in the administration of negative and/or positive consequences.
- Call parents to discuss student behavior problems.

Strong Administrative Interventions (SA):

- Require student to go to school office or place of detention.
- Require student to go to after-school detention.
- Request police to come to school and remove student.
- Require parent(s) to come and remove student or send student home.
- Refer student for placement in in-school suspension.

Wood 1/87

Chapter 3

APPLYING STANDARDS THROUGH INTERVENTIONS

David G. Sodac
Mississippi Bend Area Education Agency
Bettendorf, Iowa

Ellen McGinnis, Ph.D.
Des Moines Independent Community School District
Des Moines, Iowa

Chapter 3

APPLYING STANDARDS THROUGH INTERVENTIONS

David G. Sodac
Ellen McGinnis, Ph.D.

This manual addresses applying curriculum standards for behaviorally disordered youth and provides resources to guide professional practices in programming. The standards have been explained in the introductory chapter. The resources for implementing the standards are contained in the collection of intervention suggestions, philosophies and programming approaches written by Iowa professionals and contained in the remainder of this manual.

This manual is not a collection of strategies that makes up a predetermined curriculum for behaviorally disordered students. It is important to understand that the concept of "standards" implies best practices for affecting behavior change while in the process of programming for students who are identified as behaviorally disordered. The standards are also intended to provide consistency in programming and to provide a way to gauge thoroughness of programming attempts. Unfortunately, this manual does not provide a step by step process from which teachers can implement a behavioral change curriculum.

Instead of advocating a predetermined curriculum, we propose that the data from the assessment process (such as that described in The Iowa Assessment Model) which were used to identify the youngster as behaviorally disordered should be used to guide programming interventions. In this way we are better able to match the educative techniques to the behavioral and emotional needs of the student in a prescriptive manner. Additionally, a team approach to designing interventions is advocated, realizing that the youngster's problems may be influenced from a variety of sources (home, school, community). Together the team of professionals and parents have a better chance to affect change than does any one of these sources alone. We, as special educators, recognize the reality that a single isolated approach is highly unlikely to "fix" a problematic behavior. Instead, a combination of approaches will need to be implemented.

Each program, each teaching approach, and most importantly, each entering student, provide their own uniqueness and challenges. We just can't "even out" all the rough edges on the same manufacturing assembly line approach and produce the same quality and size product.

Users of this manual are encouraged to view this publication as a way to ignite new ideas and suggestions in programming. Teachers are requested to compare their own programming approaches to those suggested.

The proposed programming standards precipitated the need to discuss interventions. The standards are intended to assure that teachers, programs and support teams address all areas of programming that are felt to be essential in providing effective planning for BD students within the school setting. The programming interventions are the means through which the standards can be realized.

Standards I and II (Rewarding/increasing desirable behaviors and managing/decreasing undesirable behaviors) most directly relate to individual or overall classroom management approaches that a teacher chooses to implement. Chapters 4 and 5 of this manual intend to explore philosophies, approaches and skills to assist the teacher in meeting Standards I and II. Standards III and IV (reflecting interventions to enhance achievement, personal adjustment, interpersonal relating skills and functional skills development) most directly refer to curriculum approaches and suggestions that place the "specialization" in special education programming for BD students. Chapters 6, 7, 8, 9 and 10 in this manual intend to provide you with resources and suggested approaches through which Standards III and IV can be addressed. Standard V (reflecting generalization and maintenance skills for reintegration) is addressed in Chapters 11 and 12 that intend to assure all programming attempts are internalized within the student as you prepare the student for successful functioning in our regular education programs.

Where does one begin to use this manual? Don't attempt to start at page one and absorb each step along the way—the manual simply can't be organized in that fashion. Begin by reviewing and analyzing your collection of assessment data. So often it seems that minimal effort is given to the collection of data and the analysis of its potential in determining appropriate interventions. A basic approach to problem solving is to allow the data collection to guide you through team discussion in which treatment approaches are chosen. In Chapter 2, Wood proposes the thorough analyses of antecedents and consequences impacting on the exhibiting behavior of a referred student. He provides and details a worksheet approach to facilitate the organization of that data. An additional example of Wood's worksheet is contained in the appendix of this chapter. The example proved helpful as a reference in completing the Placement Programming

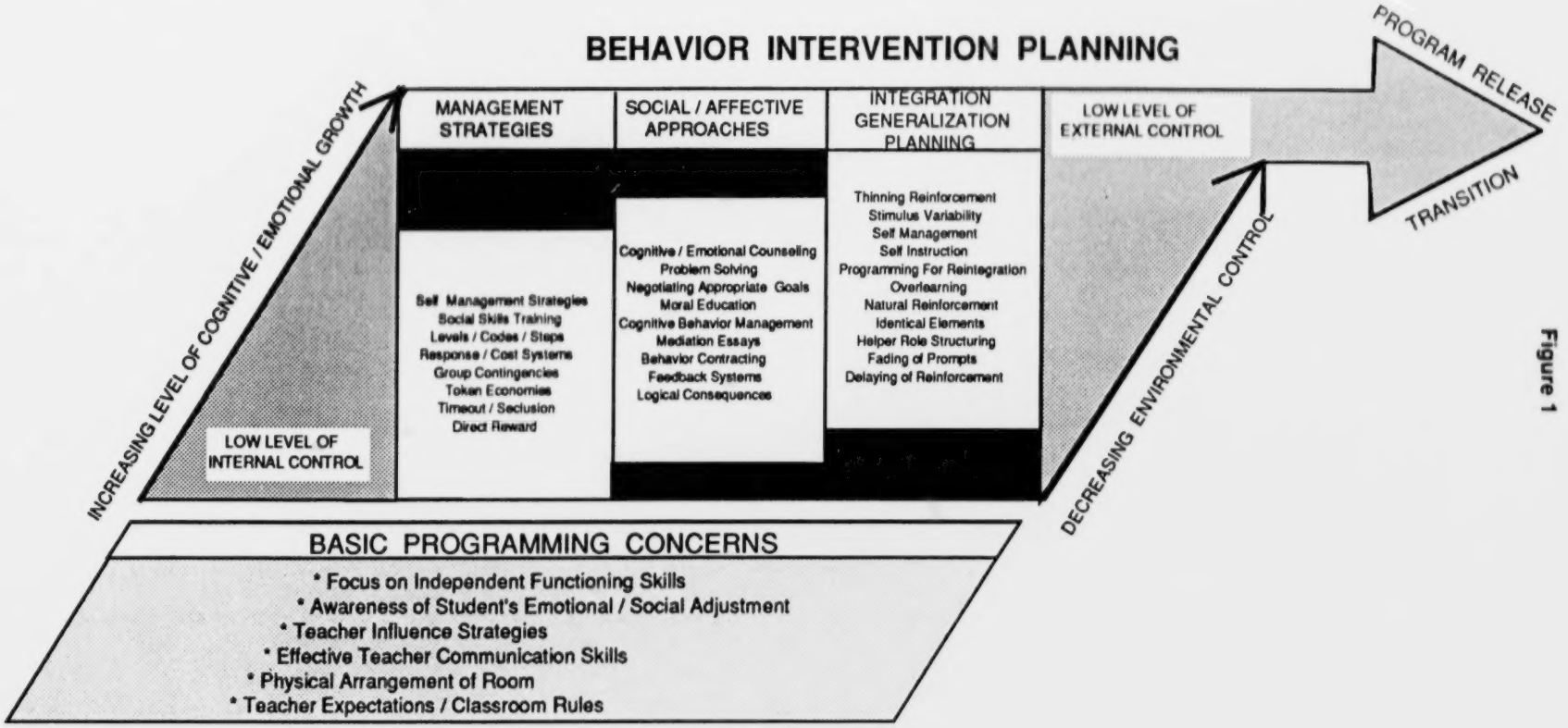

BEHAVIOR INTERVENTION PLANNING
INCREASING LEVEL OF COGNITIVE / EMOTIONAL GROWTH
LOW LEVEL OF INTERNAL CONTROL
MANAGEMENT STRATEGIES
SOCIAL / AFFECTIVE APPROACHES
INTEGRATION GENERALIZATION PLANNING
LOW LEVEL OF EXTERNAL CONTROL
PROGRAM RELEASE
TRANSITION
DECREASING ENVIRONMENTAL CONTROL
Self Management Strategies
Social Skills Training
Levels / Codes / Steps
Response / Cost Systems
Group Contingencies
Token Economies
Timeout / Seclusion
Direct Reward
Cognitive / Emotional Counseling
Problem Solving
Negotiating Appropriate Goals
Moral Education
Cognitive Behavior Management
Mediation Essays
Behavior Contracting
Feedback Systems
Logical Consequences
Thinning Reinforcement
Stimulus Variability
Self Management
Self Instruction
Programming For Reintegration
Overlearning
Natural Reinforcement
Identical Elements
Helper Role Structuring
Fading of Prompts
Delaying of Reinforcement
BASIC PROGRAMMING CONCERNS
* Focus on Independent Functioning Skills
* Awareness of Student's Emotional / Social Adjustment
* Teacher Influence Strategies
* Effective Teacher Communication Skills
* Physical Arrangement of Room
* Teacher Expectations / Classroom Rules

Figure 1

Plan on the example student also contained in the appendix.

Through the analysis of the gathered data collection on each student, focus can be placed on the level of internal control and the degree of external environmental control which is evidenced in the success or failure of prior interventions. For example: Was the student able to delay reinforcement over a period of 5 days (more internal) or did that student demand a reward schedule of every 30 minutes (more external)? Did that student show a tendency to respond to a behavioral contracting approach (more internal) or require visual behavior reminders in the form of a point sheet (more external)? Possibly, none of the prior interventions were effective due to the strong student need for a smaller classroom, increased structure and/or a change in the level of academic instruction.

It is difficult to guide people in determining where to begin programming interventions acknowledging the uniqueness that each student brings into program planning. Many professionals have focused their philosophies onto intervention diagrams. Within our state Nichols (1984) and McKinnon and Kiraly (1984) have contributed greatly to the understanding of management and intervention planning as evidenced through their work reprinted and contained in this chapter's appendix. Diagrams are often confusing to the consumer attempting to understand them. Despite such confusion, the editors of this manual have presented yet another diagram that reflects the philosophies and intent of the Iowa Standards in Behavior Disorders. What can be provided is a repertoire of interventions from which to choose. These intervention approaches have been illustrated in the diagram seen in figure 1. Most of the approaches and interventions from which to meet the intent of the standards have been globally organized on the diagram. General categories of interventions are organized as they relate to the need for more external control versus the level of internal or self-control.

This diagram represents a philosophical approach to looking at intervention planning. This philosophy suggests that some individuals have a higher need for environmental (or external) control than do others. For example, a very young child will likely need someone else to provide structure, rules, expectations, consequences, and frequent rewards. Another child may be more "internal;" that is, she does not need someone else to provide rewards and structure for her on a systematic and frequent basis. The level of need for external/environmental or internal/self-control falls along a continuum--they are not absolutes. For instance, one individual may be highly external while another may be moderately external, and so forth. Accepting this philosophy suggests that programming interventions be instituted which match the level of the student's need for environmental control.

The chart of intervention approaches is intended to illustrate general program planning to effect behavioral improvement from placement to reintegration.

The overall shape of the Intervention Planning Diagram is visually slanted toward the eventual return of the student into the mainstream, without special education programming or support services. In reaching this ultimate goal, all MANAGEMENT STRATEGIES, SOCIAL/AFFECTIVE APPROACHES, and INTEGRATION/GENERALIZATION PLANNING are exhausted through the BD program or support service. The BD student who first enters our special education domain in the planning phase typically demonstrates a higher need for environmental manipulation and external control. As a student progresses through a BD program, less external control is planned for while the student's internal self-control develops to the point of being reintegrated and eventually monitored for release into the mainstream.

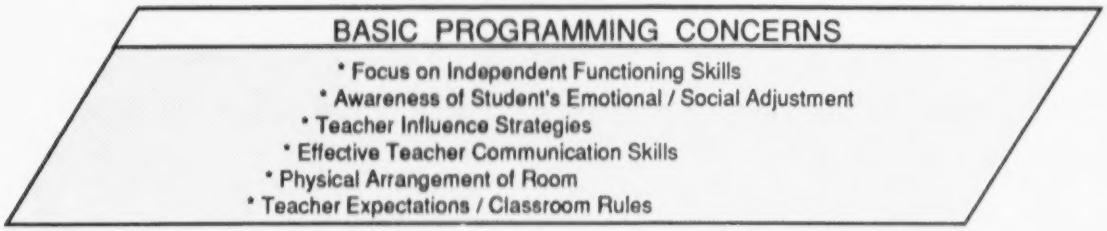
No student is expected to have intervention planning begin at the bottom left rectangular area of the diagram and progress through all three areas of intervention to assure the goal of successful reintegration. However, careful planning, based on the incoming placement level of internal self-control and the need for environmental control may make for a more successful experience through special education placement. Often BD programs reflect only one of the three areas of intervention emphasis listed. By doing so, teachers risk the chance that the student are not adequately prepared to move through a program and into the mainstream effectively. Often teachers grasp onto one approach designed to effect the behavioral change desired, only to find that this approach meets with moderate success and leaves all the students at that original intervention stage.

One particular student may enter the BD program at a cognitive level ready to negotiate his goals and need a minimum of environmental control. To make that student start at a token economy level of intervention may only frustrate the student, erode the level of existing self-control and aid to destroy other students' levels of programming contentment.

The broad base of the diagram (figure 2) crosses through the entire program planning for any BD student. Within this base are basic good teaching considerations. The base of this diagram is to the farthest left point of the overall diagram, indicating the need for initial planning prior to placement of

students. These good teaching considerations extend across the base of the diagram reflecting continued emphasis throughout the student's placement.

Figure 2


BASIC PROGRAMMING CONCERNS
* Focus on Independent Functioning Skills
* Awareness of Student's Emotional / Social Adjustment
* Teacher Influence Strategies
* Effective Teacher Communication Skills
* Physical Arrangement of Room
* Teacher Expectations / Classroom Rules

Each component contained within this base are briefly described below but are extensively expanded in the corresponding chapters listed.

Teacher Expectations/Rules (ch. 5). Expectations are to be stated in language familiar to students and in positive terms. Rules should include a statement of consequences.

Classroom Physical Arrangement (ch. 5, 9). The planned use of a classroom must be precisely engineered to accommodate the full variety of curriculum approaches. Planning should include space, displays, traffic patterns, desks, learning centers, lighting, etc.

Effective Teacher Communication Skills (ch. 4, 5, 9). Includes developing a repertoire of verbal and nonverbal cues, approaches, and instructional language to elicit a calming effect and aid in management control. Communication also includes appropriate counseling language.

Teacher Influencing Techniques (ch. 4, 5, 12). These interventions are for use when inappropriate behavior is minimally disruptive on the surface but could easily escalate. Influencing techniques can be divided into those supporting self-control, those involving task assistance and those related to reality and value appraisals.

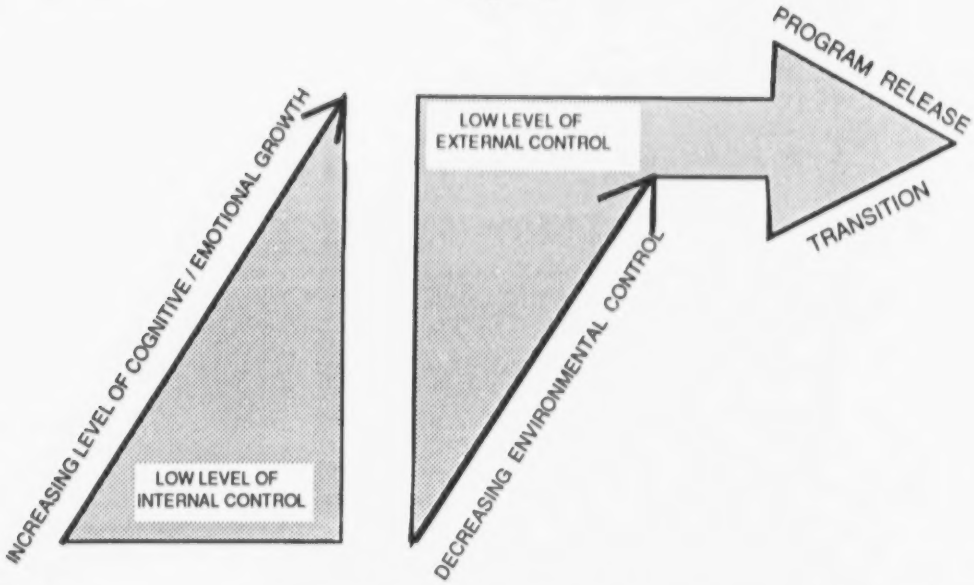
Awareness of Student's Emotional/Social Adjustment (ch. 6, 8, 10). A careful review of assessment data assists in identifying areas of emotional reactions and patterns that need to be addressed in planning interventions. The student's social adjustment in peer, classroom, recreation, community, and home interactions are analyzed through the review of observation, interviews, and assessment instruments to assist in preparing an appropriate curriculum approach to remediate concerns.

Focus on Independent Functioning Skills (ch. 9, 11, 12). Refers to the initial and ongoing planning that aids in determining the least restrictive placement, the reintegration stages, and the practical methods which help to generalize and maintain positive behavior patterns and improved academic skills.

The side triangular shaped areas within this diagram (figure 3) reflect a basic philosophical concern of the editors. Students are considered for BD programs due to their manifestation of behavior that significantly deviates from their age peers. This behavior pattern is of such documented intensity, frequency, and duration that all attempted regular classroom interventions have proven ineffectual. This student can be viewed as demonstrating poor internal control in their current classroom setting and needing more external environmental manipulation within the special classroom setting or support service. A preschool youngster, a child with a mental disability, or a severely behaviorally disordered child may fall at the far end of the external control continuum. Through effective program planning, the student gradually increases their internal self-control and, consequently, needs less external manipulation. Thus, the student is readied for reintegration back to the mainstream.

Throughout the INTERVENTION PLANNING DIAGRAM, the intervention planning reflects the overall philosophy of the student needing the external control with movement toward increasing self-control. The interventions listed are not in a hierarchy of suggested stages, however, movement from bottom to top and left to right begin with a high level of environmental control progressing towards internal self-control and eventual readiness for integration.

Figure 3



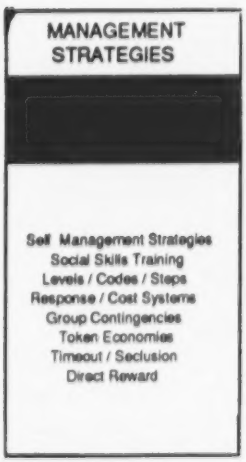


Figure 4

The actual interventions listed have been organized into three broad categories. The first rectangular area to the readers' left (figure 4) contain interventions that

require much teacher and environmental control. These interventions are referred to as the MANAGEMENT STRATEGIES.

Direct Reward (ch. 5, 12). When wanting to strengthen an existing behavior and in developing new behaviors, reinforcers are directly administered. There are various types of reinforcers and patterns of timing for the delivery of those reinforcers.

Timeout/Seclusion (ch. 4). Timeout refers to removing a student from reinforcement. There are nonexclusionary approaches to exclusionary removal out of the classroom.

Token Economies (ch. 5). Token system essentials include tokens, backup reinforcers (tangible objects or activities) for which tokens may be exchanged, contingencies specifying the conditions under which tokens may be obtained or lost, as well as the exchange rate of tokens for backup reinforcers.

Group Contingencies (ch. 4, 5). Group contingencies for reward or punishment are related to group characteristics and take advantage of social reinforcers. There are three classifications of group-oriented contingencies addressed in this manual: dependent, independent, and interdependent. Essentially the group receives reinforcement contingent upon the group exhibiting the desired behavior.

Response Cost Procedures (ch. 4, 5). This is a behavior management technique which involves the loss of previously earned reinforcers following misbehavior. An inappropriate "response" is followed by the "cost".

Levels, Codes, or Step Systems (ch. 4, 11). The classroom behavior management system can be graduated in degrees of structure dependent upon the developing self-control of the student. Step systems allow students to be treated differently within the same classroom while leading them naturally and systematically into greater degrees of self-management.

Social Skills Training (ch. 6, 8, 10). Sequence of formal instruction that teaches students socially competent ways of behaving and interacting in school to community situations. The instruction can range from individual to group formats.

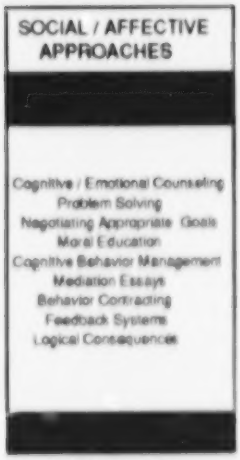


Figure 5

Self-Management Strategies (ch. 4, 6, 8, 12). The student becomes actively involved as the manager of his own behavior performance. Such an intervention enhances the generalization and maintenance of improved behavior.

Adjoining the MANAGEMENT STRATEGIES rectangle is the SOCIAL/AFFECTIVE APPROACHES (figure 5). This listing of interventions is slightly elevated on the chart indicating a movement up in the student's developing internal control. The social/affective interventions are generally more effective when the student demonstrates some internal self-control but can be implemented at the same time as the management strategies, dependent upon the student's readiness.

Logical/Natural Consequences (ch. 4). A natural consequence is an inevitable occurrence that happens by itself while a logical consequence is arranged but directly related to the preceding behavior.

Feedback Systems (ch. 8). As the student demonstrates increased self-control, it's time to have the student monitor his own improving behavior. This can take the form of graphing earned points to intermittant recording of on-task behavior. The approach can include written instruments to verbal feedback from others.

Behavior Contracting (ch. 5, 11). Contracting is an agreement between two parties which specifies the required behavior to be exhibited and the consequences for fulfillment of that requirement. Contracting places the contingency for reinforcement into a written document.

Mediation Essays (ch. 4). A mediation essay is a prewritten printed dialogue for students to copy following a reoccurring misbehavior. The dialogue generally suggests more appropriate behavior alternatives.

Cognitive Behavior Management (ch. 6, 8, 12). An approach used to integrate cognitive therapy and behavior management. Self-control is taught through use of a series of steps in which overt speech, modeling, practice, and covert speech is used.

Moral Education (ch. 6, 7). Increasing the reasoning ability of students through group discussions of moral dilemmas is the focus of this approach. Moral education xamines issues from both the student's perspective and that of others.

Negotiating Appropriate Goals (ch. 12). The student takes an active role in working with the teacher to define realistic behavior expectations and consequences.

Problem Solving (ch. 8, 10). Instructional means of teaching students to direct their behavior realistically and acceptably. The student and teacher explore the behavior, the precipitators of the behavior, and its effect on others. Seeking an understanding of the behavior and learning alternative means of behaving is the focus of this intervention.

Cognitive-Emotional Counseling (ch. 5, 7). Refers to affective education concerning the emotional development of students in areas of attitude, values, and feelings. Using affective curricula helps students to improve their skills in the areas of interpersonal problem solving, self-control, adult/peer interaction, and communication.

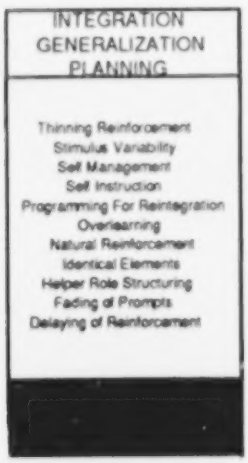


Figure 6

The third rectangle entitled INTEGRATION/GENERALIZATION PLANNING (figure 6) contains interventions that help to prepare the student for transition back into the mainstream. The approaches can and should be utilized across all three intervention rectangles but focus more directly on developing internal controls and, consequently, require more self-control and less environmental manipulation.

Generalization (ch. 9, 11, 12). Refers to several techniques designed to plan for the transfer of learned behaviors across situations, settings and individuals (generalization), and for continued use of the behavior or skill over time (maintenance). Specific generalization and maintenance techniques apply to the instructional setting, methods of instruction, and reinforcement systems.

GENERALIZATION AND MAINTENANCE PROCEDURE

1. Delaying of Reinforcement. Allowing time between the performance of a behavior and the dispensing of the reinforcement.

2. Fading of Prompts. Gradually reducing the frequency and number of teacher cues to perform a task or a skill.

3. Peer Tutoring. Use of peers to teach a skill or behavior to another student. This principle implies that the student who is the tutor will be better able to generalize the skill.

4. Identical Elements. Gradually making the teaching setting resemble the application setting (the regular classroom). Attention is given to the physical setting, materials, instructional techniques, and class routine.

5. Natural Reinforcement. Refers to the use of reinforcement which occurs naturally in the child's environment. Steps to apply in selecting natural reinforcers include: observation of the environment, determining which behaviors are reinforced in the natural environment, and teaching the student how to seek the reinforcement.

6. Overlearning. Refers to learning a skill or behavior to a mastery level of performance so that the skill becomes automatic.

7. Programming for Reintegration. Involves programming common elements between the regular class and the special class setting. The second way to program for reintegration is to introduce elements of the special class into the regular classroom.

8. Self-instruction. A process of "talking oneself through" the completion of a task or skill. A five-step procedure is typically followed in teaching youngsters this technique.

9. Self-management. A planned strategy in which the youngster assesses, records, and reinforces his/her own behavior.

10. Stimulus Variability (variety in teachers, settings, and examples). Providing students with practice in applying skills in various different situations and settings and with a variety of different school personnel.

11. Thinning Reinforcement. Initially, a new skill should be rewarded each time it occurs. Thinning the reinforcement refers to gradually rewarding skill use less frequently.

Integration Planning (ch. 11, 12). This refers to the development of a specific, sequential plan designed to reintegrate a youngster back into the regular class setting. Integration planning defines reintegration, specifies procedures, and assigns responsibilities to various personnel to achieve this goal.

SUMMARY

In accordance with the proposed standards, this chapter provided a way of viewing the programming of behaviorally disordered youngsters by including the components of BASIC PROGRAMMING CONCERNS, GENERALIZATION and INTEGRATION, MANAGEMENT STRATEGIES, and SOCIAL/AFFECTIVE APPROACHES, as well as attending to ACADEMIC NEEDS. The MANAGEMENT STRATEGIES and SOCIAL/AFFECTIVE APPROACHES are viewed as falling along a continuum of external to internal control and are designed to be prescriptively matched to each individual's behavioral, social, and emotional needs. Not one single approach is advocated; instead several approaches and techniques will likely need to be applied. As an individual youngster achieves more internal control, alternative interventions will be selected to foster this growing control while programming for increased behavioral, social, and emotional growth.

It is beyond the scope of this manual to present important programming considerations which should occur in the behaviorally disordered student's home and community environments. Instead, the intent of the following chapters is to provide a detail of specific programming interventions which, when applied prescriptively to the needs of youngsters, will allow educators to program more effectively for the students we serve.

Behavior Disorders Placement Programming Plan

Of concern to the editors is how the support teams can best organize their planning for interventions and comply with the State BD Standards. The Department of Special Education allows each school district in cooperation with Area Education Agency to explore and establish procedures in meeting compliance requirements. School districts will be expected to address the manner in which they can document their compliance to the BD Standards. A suggested format and approach is addressed in this section of the chapter. The format is being proposed not as a requirement but to give you one means of how this required documentation can occur.

Most BD programs establish "team times" during which they review the student's progress, address and refine interventions, and propose changes in programming components. Often these "team times" are held weekly and the team is composed of the classroom teacher, the support AEA personnel, and a building administrator. During the initial meetings of these teams, a focus on each placed student could occur. A review of assessment data and present teacher observations could guide the team to fill in the blank cells of the Behavior Disorders Placement Programming Plan (figure 7). It is suggested that a program coordinator or a case manager, who records the team's discussion and oversees the programming plans' ongoing implementation, be assigned to each student.

Each BD Standard is included on this form. The support team focuses its discussion on each of the standards, brainstorming the uniqueness of the behavior and the plan of intervention. The form is intended to be an ongoing reference from which to gauge the programming impact on the student. Items may be deleted or added as the support team continues its "team time" throughout the year. The form should become not only useable to the team but should be a means of demonstrating and documenting the program's compliance to the BD Standards.

Keep in mind, this suggested format is not intended to supplant your current IEP documentation but could be an addition to the existing forms.

A clean reproducible master form is included for your use in addition to a completed example of what could be included on the form (see Appendices).

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BEHAVIOR DISORDERS PLACEMENT PROGRAMMING PLAN

Student_____Grade Level_____D.O.B._____

Recommended Program_____Program Coordinator_____

Desirable Behaviors To Increase	Method To Maintain/Reward
Undesirable Behaviors To Decrease	Method Of Intervention

Personal Adjustment Interpersonal Relationship Concerns	Method Of Intervention
Achievement Deficiencies	Method Of Intervention
Reintegration Plan	
Additional Concerns/Recommendations	

Figure 7

APPENDICES

A. Analysis/Planning Worksheet

B. Behavior Disorders Placement Programming Plan

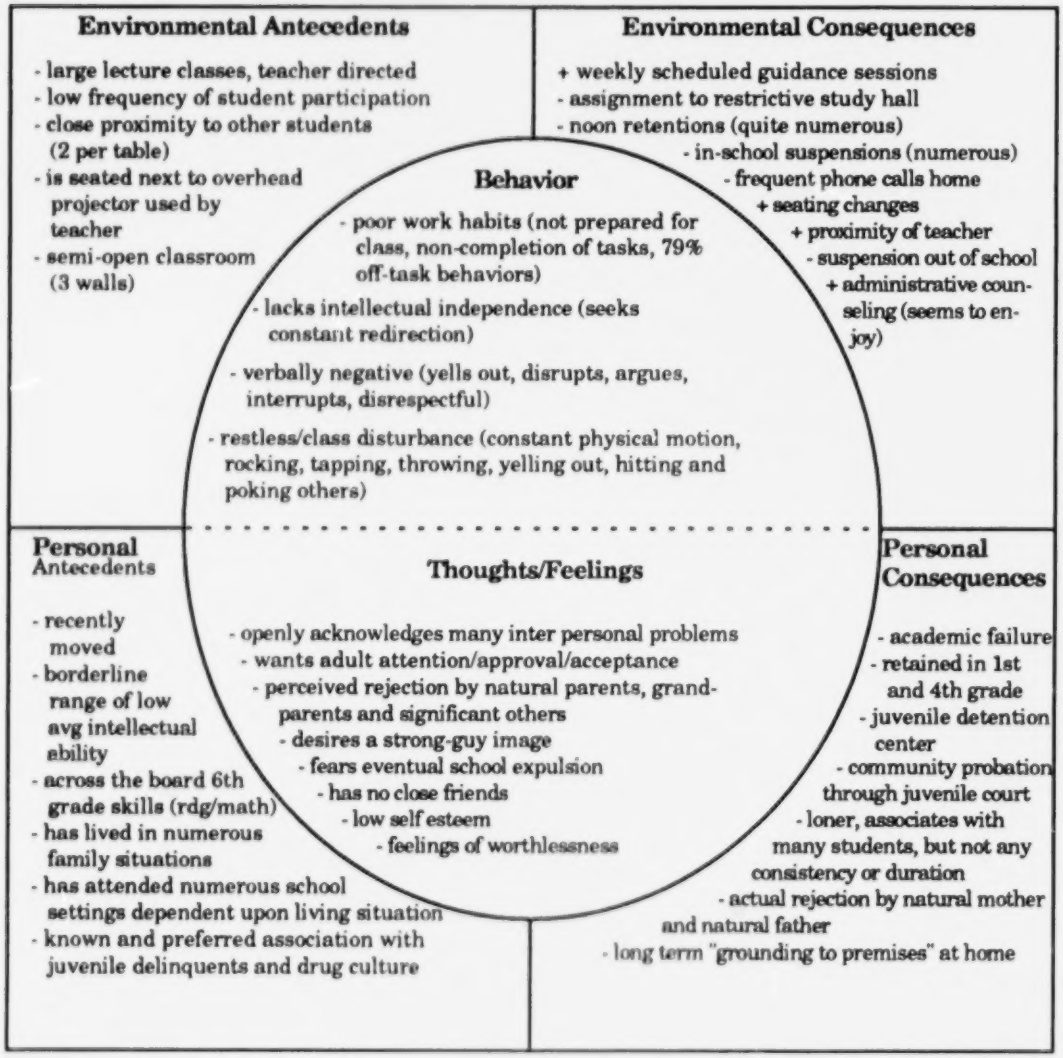
C. Completed Example of Behavior Disorders Placement Programming Plan

D. Management Strategies Continuum

E. Step-Up/Step-Down Model

Appendix A

ANALYSIS/PLANNING WORKSHEET


Environmental Antecedents
- large lecture classes, teacher directed
- low frequency of student participation
- close proximity to other students (2 per table)
- is seated next to overhead projector used by teacher
- semi-open classroom (3 walls)
Environmental Consequences
+ weekly scheduled guidance sessions
- assignment to restrictive study hall
- noon retentions (quite numerous)
- in-school suspensions (numerous)
- frequent phone calls home
+ seating changes
+ proximity of teacher
- suspension out of school
+ administrative counseling (seems to enjoy)
Behavior
- poor work habits (not prepared for class, non-completion of tasks, 79% off-task behaviors)
- lacks intellectual independence (seeks constant redirection)
- verbally negative (yells out, disrupts, argues, interrupts, disrespectful)
- restless/class disturbance (constant physical motion, rocking, tapping, throwing, yelling out, hitting and poking others)
Personal Antecedents
- recently moved
- borderline range of low avg intellectual ability
- across the board 6th grade skills (rdg/math)
- has lived in numerous family situations
- has attended numerous school settings dependent upon living situation
- known and preferred association with juvenile delinquents and drug culture
Thoughts/Feelings
- openly acknowledges many inter personal problems
- wants adult attention/approval/acceptance
- perceived rejection by natural parents, grandparents and significant others
- desires a strong-guy image
- fears eventual school expulsion
- has no close friends
- low self esteem
- feelings of worthlessness
Personal Consequences
- academic failure
- retained in 1st and 4th grade
- juvenile detention center
- community probation through juvenile court
- loner, associates with many students, but not any consistency or duration
- actual rejection by natural mother and natural father
- long term "grounding to premises" at home

Appendix B

BEHAVIOR DISORDERS PLACEMENT PROGRAMMING PLAN

Student_____Grade Level_____D.O.B._____

Recommended Program_____Program Coordinator_____

DESIRABLE BEHAVIORS TO INCREASE	METHOD TO MAINTAIN/REWARD
UNDESIRABLE BEHAVIORS TO DECREASE	METHOD OF INTERVENTION

PERSONAL ADJUSTMENT INTERPERSONAL RELATIONSHIP CONCERNS	METHOD OF INTERVENTION
ACHIEVEMENT DEFICIENCIES	METHOD OF INTERVENTION
REINTEGRATION PLAN	
ADDITIONAL CONCERNS/ RECOMMENDATIONS	

Appendix C

Completed Example

BEHAVIOR DISORDERS PLACEMENT PROGRAMMING PLAN

Student *Ricky Pratt* Grade Level *9* D.O.B. *9-26-73*

Recommended Program *Self-contained 3.6* Program Coordinator *P. McGee*

DESIRABLE BEHAVIORS TO INCREASE	METHOD TO MAINTAIN/REWARD
1. *Improve on task behavior* 2. *Increase attending time to task* 3. *Raise hand for assistance* 4. *Improve productive teacher/student interaction* 5. *Complete assigned task* 6. *Be prepared for class*	1. *Classroom management system* 2. *Time begin/time end self monitoring card-graph results with cons. weekly* 3. *Classroom management system* 4. *Through behavior awareness feedback sessions held daily* 5. *Classroom management system* 6. *Classroom management system (-)noon retention (if no assignment) (+)or early 5 minute dismissal*
UNDESIRABLE BEHAVIORS TO DECREASE	**METHOD OF INTERVENTION**
1. *Verbal outburst* 2. *Out of seat* 3. *Disruptive physical action, poking, etc.* 4. *Constant teacher attention seeking* 5. *Physical aggression*	1. *Assertive discipline procedure name / / escort room for remainder of period* 2. *Same " " "* 3. *Same " " "* 4. *Ignore/respond only when hand up* 5. *Systematic exclusion to all day in school suspension room* *Note: Should student be returned 3 times during day, will receive 1/2 in school suspension. Accumulation of 3 total days in school suspension will result in 1 out of school suspension.*

PERSONAL ADJUSTMENT INTERPERSONAL RELATIONSHIP CONCERNS	METHOD OF INTERVENTION
1. *Poor peer approaching behaviors* 2. *Low self esteem* 3. *Absence of close friends* 4. *Apparent depression* 5. *Need for positive time spent with father, significant males*	1. *Personal development lab 5 times a week/ curriculum M.A.R.C.* 2. *Involvement in karate lessons out of school activity once a week* 3. *Karate group* 4. *Individual counseling twice a week with soc worker* 5. *Bowling w/father, 1on1 w/consultant*
ACHIEVEMENT DEFICIENCIES	**METHOD OF INTERVENTION**
1. *Low math-BASIS 6.2 GE* 2. *Low reading-BASIS 6.0 GE* *Gates-McGinity comp.- 4.8 GE*	1. *Individual math course/ Perelli* 2. *Individual English* 3. *Reading development course/ Fisher*

REINTEGRATION PLAN

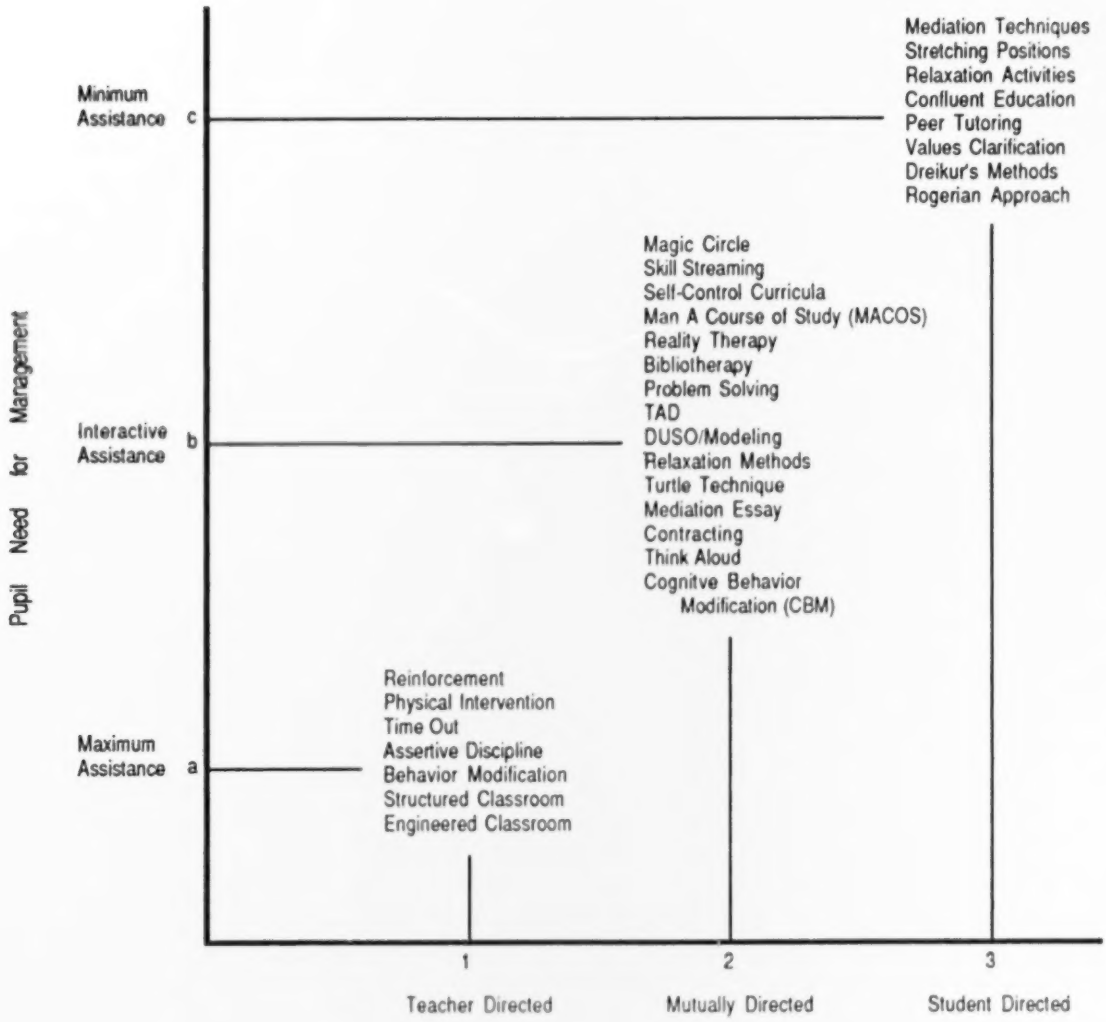
1. *Student may need involvement with program for 2yrs with gradual integration 2nd year in small classes- Home Economics, Family Living*
2. *Classroom management system will be monitored weekly, if an increase in % of points is maintained for 1 quarter (8 wks) consider integration 2nd semester into SCI English and Math*
3. *Junior year consider enrollment into Jr. College Special Needs Program for vocational training modules*

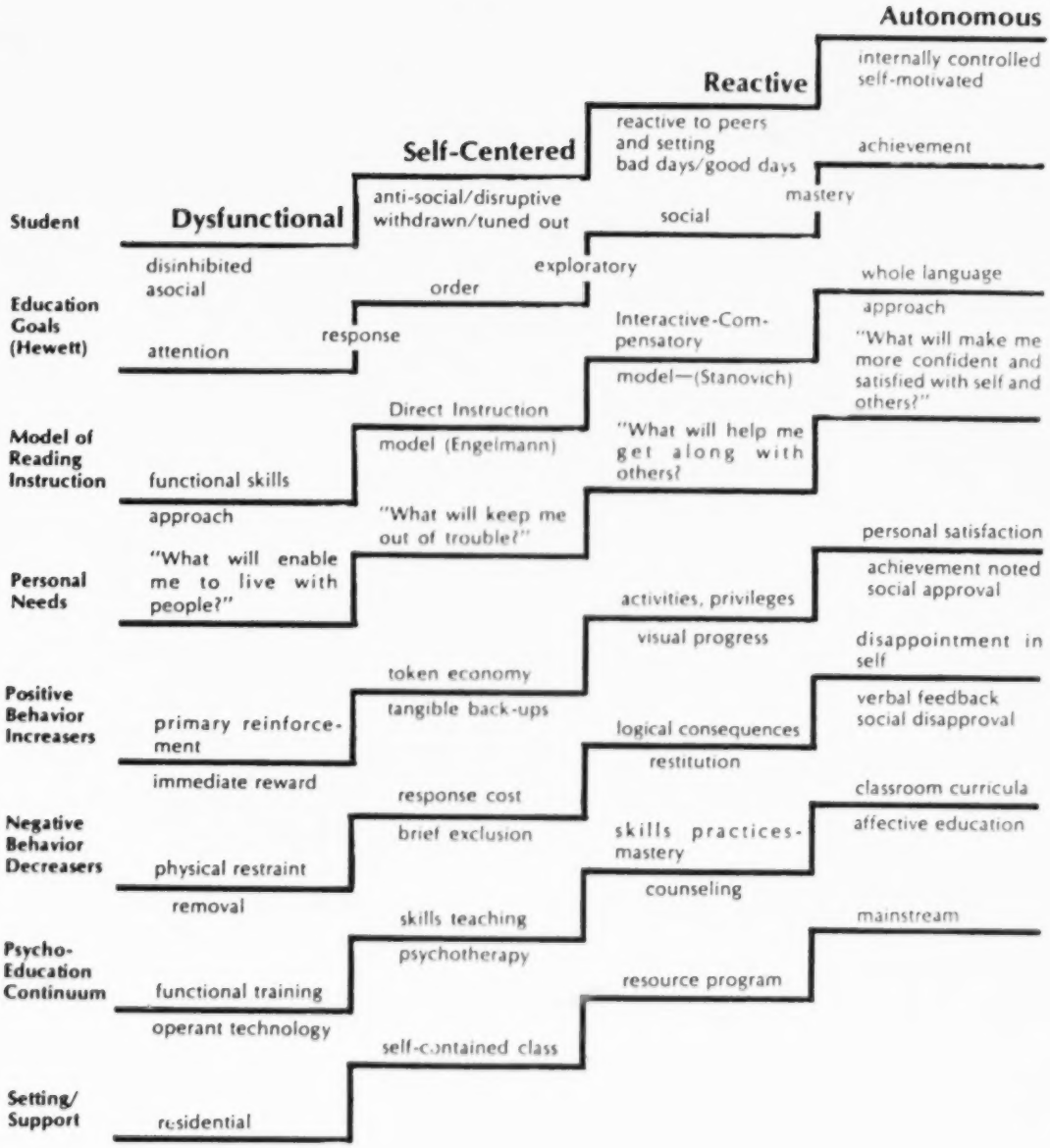
ADDITIONAL CONCERNS/ RECOMMENDATIONS

1. *Need for family counseling - arrange with FAMILIES INC.*
2. *Address personal grooming in one on one counseling sessions*

Appendix D

Management Strategies Continuum (McKinnon & Kiraly, 1984)





STEP-UP/STEP-DOWN MODEL

(Nichols, P. 1984)

The Iowa Program Standards For Interventions In Behavioral Disorders

SECTION TWO:
INCREASING/DECREASING BEHAVIORS

Chapter 4: INCREASING DESIRABLE BEHAVIORS

Chapter 5: MANAGING & DECREASING UNDESIRABLE BEHAVIORS

Chapter 4

INCREASING DESIRABLE BEHAVIORS

Mary M. Davis
President
Davis Consulting Group
West Des Moines, Iowa

Deb Brower
Director
Mountain Plains Regional Resource Center
Des Moines, Iowa

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Chapter 4

INCREASING DESIRABLE BEHAVIORS

Mary M. Davis
Deb Brower

INTRODUCTION

Teachers of the behaviorally disordered rely heavily upon behavior change interventions because they are dealing with children and youth who are most commonly characterized by patterns of behavioral excess and deficit (Kauffman, 1985). The frequence of behaviors that are in excess must be decreased; the frequency of those behaviors that are deficient must be increased. The ultimate dependent measure of program success is a change in student behavior. Numerous theoretical approaches to changing behavior exist. An oftentimes cumbersome task is to sort through the plethora of approaches to determine the most effective approach for the student and the most acceptable approach for the teacher.

When examining various treatment approaches for increasing positive behavior, it is important to distinguish between the external control approaches and the internal control approaches. Rich (1983) defines external control approaches as those in which the interaction, objective, and so forth are more exclusively regulated by the teacher, and internal control approaches as those in which the student assumes intrapersonal and interpersonal regulations.

Still another way to examine treatment approaches is to consider those which are designed for group management versus those which are designed primarily for individual management. Traditionally, teachers who work with behaviorally disordered students have found success when working with students on an individual basis; however, social conditions do not permit teachers to exclusively manage students' behaviors in this way. Teachers need to be cognizant of those approaches which emphasize managing the behavior of groups.

The purpose of this chapter is to discuss several approaches for increasing desirable behaviors and their implementation. Some approaches are externally regulated, while others are internal. The approaches can be used with individual or group situations or both.

THE BEHAVIORAL APPROACH

The behavioral approach is based on the systematic planning of contingent environmental events to produce change in student behavior. Based upon the assumption that both desirable and undesirable behaviors are learned, the behavioral approach offers ways of decreasing the frequency of undesirable behaviors and increasing the frequency of desirable behaviors. According to Walker (1979), behavioral approaches are among the most functional tools available to educators of behaviorally disordered children and youth. Despite their documented effectiveness, however, behavioral strategies have not been enthusiastically received by all professionals (Simpson & Sasso, 1982). A possible reason may be a lack of understanding of the entire approach and a misuse of parts of the approach. Some teachers, historically, have used; positive and negative reinforcers **unsystematically** (Tanner, 1978). However, effective behavior modification is the **systematic** arrangement of **environmental** events which produces a **specific** change in observable behavior. The major focus of this section will be to present techniques for strengthening existing behavior (those behaviors which a child does only some of the time, but are already in the child's repertoire), developing new behavior (those behaviors a child does not perform and are not in the child's repertoire), and maintaining new behavior based upon the principles of the behavioral approach.

Principles of Reinforcement

A reinforcer is any event that increases the probability of the recurrence or increasing of the behavior it follows. Reinforcers are also termed rewards. Everyone in their daily lives is influenced by results or consequences of certain acts or behaviors. Our continued performance of certain behaviors is governed by results or consequences. People tend to continue to engage in behavior which is pleasurable to them or reinforced in a way which is pleasurable. People tend to avoid those situations or behavioral acts which produce pain or unpleasantness. Children are very proficient in their use of rewards to influence adult behavior. Many positive or appropriate behaviors are maintained by naturally occurring reinforcers (those reinforcers already present in the environment, such as grades or recess); however, for some children

natural reinforcers are insufficient to maintain all appropriate behaviors. All students do not respond to the same reinforcers. The idea of getting a good grade may not be pleasurable enough for some students. Reinforcers need to be individualized just as you individualize a child's academic program. Different events bring pleasure to different people. In some instances when a behavior change does not occur, the teacher may assume that the reinforcer did not work; however, one of the basis rules of reinforcement may have been violated—the individualization of reinforcers.

There are two reinforcement operations, positive and negative reinforcement. Positive reinforcement is the process of adding something good or desirable to the environment. Alberto and Troutman (1986) define positive reinforcement as the contingent presentation of a stimulus, immediately following a response, that increases the future rate and/or probability of the response. Negative reinforcement involves the process of taking away something bad immediately following the desired behavior. Positive or negative reinforcement increases the future rate and/or probability of the response. For example, if Billy is exhibiting on-task behavior and completes his work, the teacher may reward him by permitting him to sit in the row of seats where all his friends are seated. The teacher has rewarded on-task behavior and completing work. Both positive and negative reinforcement increase the strength of the behavior they follow. Both are reinforcing.

There are basically four types of reinforcers (Hall, 1971). The four types are:

1. **Primary or material reinforcers** which might include tangible items such as food, trinkets, or toys.
2. **Privileges or activity reinforcers** which might include things a person would like to do such as being line leader, helping the teacher, running an errand to the office, choosing a friend to play a game, getting the car for the weekend, or leaving school ten minutes early.
3. **Token reinforcers** might be a poker chip, a checkmark, a punch on a card, a star, etc., which could be exchanged for material, activity or social reinforcers at a later time.
4. **Social reinforcers** might include attention, verbal praise, positive feedback, a smile, recognition, applause, or physical contact such as a hug or a pat on the back.

When selecting reinforcers there are many points to consider. These points must be incorporated into the behavioral change program if the program is going to be effective with the student. Points to be considered are:

1. The **reinforcement history** of the student. Consider what has motivated the child previously (Alberto & Troutman, 1986).
2. The **deprivation state** of the student. What reinforcers do not occur naturally or frequently in the student's life, but are things the child desires?
3. The **age, interests and social background** of the student.
4. **Asking the student** what he would find reinforcing or that he would like to work for to earn a reward.
5. **The Premack Principle**. Premack (1959) observed that a high probability behavior can be used to reinforce a low probability behavior. The teacher should watch the student and note the activities the child naturally selects to do.
6. The **use of novel reinforcers**. The same reinforcer should not be used over and over again.
7. The **use of natural reinforcers** when possible. Natural reinforcers are those which are already present in the classroom situation or student's environment. If a child is responsive to these type of reinforcers, they can be provided easily and at a lower cost than material or tangible reinforcers.

According to Walker and Shea (1984), there are five rules of reinforcement to apply when implementing a behavior change program. Those rules are:

1. "**Reinforcement is dependent on the exhibition of the target behavior.**" A teacher must reinforce only the one specific behavior which is targeted for change and only after it has been exhibited. A teacher should be especially careful not to unknowingly reinforce nontarget behaviors. Walker and Shea use the following example to demonstrate: "Ms. Jones was attempting to decrease Bill's out-of-seat behavior in her classroom. It had been ascertained through observation that Bill received attention from her for out-of-seat behavior. When Bill was out of his seat, Ms. Jones proceeded to yell or otherwise reprimand him. Although Bill was receiving negative attention, his basic need for attention—positive or negative—was apparently being met in this situation. Bill's inappropriate behavior (being out of his seat) kept increasing as Ms. Jones' behavior (yelling or scolding) kept increasing.
2. "**The target behavior is to be reinforced immediately after it is exhibited.**" Timing is crucial because it demonstrates to the student the connection between a specific behavior and its consequences. It is also important to reinforce immediately to avoid the hazard of inadvertently reinforcing an intervening behavior (Alberto & Troutman, 1986).

3. **"During the initial stages of the behavior change process the target behavior is reinforced each time it is exhibited."**

4. **"When the newly acquired target behavior reaches a satisfactory frequency level, it is reinforced intermittently."** Once the target behavior has been established, the teacher should change the reinforcement from continuous to intermittent to achieve maintenance.

5. **"Social reinforcers are always applied with tangible reinforcers."** If tangible reinforcers such as candy, tokens, or chips are used, they must be paired with social praise. By doing this, the student learns to associate the social reinforcer with the tangible reinforcer and when the tangible reinforcer is phased out, the target behavior will be maintained by the social reinforcer which is naturally occurring in the environment.

Schedules of Reinforcement

The patterns of timing for the delivery of reinforcers refers to the schedules of reinforcement (Alberto & Troutman, 1986). Continuous reinforcement is the type used when the student receives a reinforcer every time he emits the required behavior. It is the best type to use to initially strengthen a behavior or to support the acquisition of a new behavior. Intermittent reinforcement is used to reinforce some, but not all, correct or appropriate responses. In this type of reinforcement, the reward is supplied only occasionally. The student knows the reward will come sometime, and therefore keeps on trying.

Two aspects of behavior that the teacher can reinforce are frequency and duration of response (Kaplan, 1982). Frequency refers to the number of times a behavior occurs, and duration refers to how long a behavior lasts. Ratio schedules of reinforcement are contingent upon the number of responses which have been emitted. Interval schedules are contingent upon the passage of time between responses. Walker and Shea (1984) cite the four most common types of reinforcement schedules. They are:

1. **Fixed Ratio Schedule.** After a fixed number of responses, reinforcement occurs. Walker and Shea (1984) use the following example: "Every time John answers 15 social studies questions correctly, he is given 10 minutes to read a comic book. John's reward (comic book reading) is based on his successful completion of a fixed number (15) of social studies questions. John's schedule is commonly referred to as a fixed ratio of 15:10." (p. 34)

2. **Variable Ratio Schedule.** In this type of reinforcement the actual number of responses required before reinforcement is given will vary so that reinforcement may come at any time. Another example by Walker and Shea (1984) is: "In Las Vegas slot machines operate on a variable ratio schedule. The gambler puts quarters in the slot and is occasionally reinforced with small rewards. This occasional reinforcement keeps the person playing until he or she is broke, but the loser always has the hope that the next pull of the arm will result in the super jackpot." (p. 35)

3. **Fixed Interval Schedule.** On this schedule a specified period of time must elapse before the reinforcer is presented. Walker and Shea (1984) illustrate this concept by the following example: "Debbie does not remain in her seat during language lessons. Mr. Quick has decided to reinforce Debbie on a fixed interval schedule of 10. Thus every time Debbie remains in her seat for 10 minutes during language lessons, she is rewarded." (p. 36)

4. **Variable Interval Schedule.** Here the reinforcer is based on a behavioral response mean. The student does not know when the reinforcement will occur. The following example by Walker and Shea (1984) illustrates this concept: "Mr. Quick has decided to place Debbie on a variable interval schedule of 10. On this schedule Debbie will continue to be reinforced for in-seat behavior. She may be reinforced the first time after only 9 minutes of appropriate behavior, the second time after 4 minutes, the third time after 9 minutes, the fourth time after 15 minutes, and the fifth time after 13 minutes. This is a reinforcement schedule of 9, 4, 9, 15, and 13. It is based on a variable interval with a mean or average of 10 minutes." (p. 36)

Principles of Increasing Behavior

Krumboltz and Krumboltz (1972) elaborate more on the behavioral model in listing various principles used to strengthen new behavior, to develop new behavior or to maintain new behavior. The categories of behaviors with the principles used are listed below:

To Strengthen New Behavior

1. Positive Reinforcement Principle: "To improve or increase a child's performance of a certain activity, arrange for an immediate reward after each correct performance." (p. 3) An example cited by Krumboltz

and Krumboltz (1972): "Gary had developed a habit of rushing into American History class just after the bell stopped ringing every day, collapsing in his seat, and frequently missing the beginning instructions of the teacher. One day, for some unaccountable reason, he appeared early. The teacher, wishing to strengthen this chance change in Gary's time of arrival, immediately approached his desk, quietly thanked him for getting to class before the bell rang, and asked if he would take roll, a prestige job exchanged among the earlier arriving class members. Following this incident Gary began arriving at class on time more frequently." (p. 9)

To Develop New Behavior

1. Successive Approximations Principle: "To teach a child to act in a manner in which he has seldom or never before behaved, reward successive steps to the final behavior." (p. 31)
2. Modeling Principle: "To teach a child a new way of behaving, allow him to observe a prestigeful person performing the desired behavior." (p. 48) This is a very effective principle when used appropriately. Lower elementary students still view their teachers as esteemed role models so the teacher would be an effective model for this age group. The older student perceives his peers as esteemed role models so a peer demonstrating appropriate behavior would be a good model. Age and developmental differences should be taken into account when implementing this principle.
3. Cueing Principle: "To teach a child to remember to act at a specific time, arrange for him to receive a cue for the correct performance just before the action is expected rather than after he has performed incorrectly." (p. 66) This is a principle which is not utilized enough by most teachers. If a teacher can remember to cue or remind a student about appropriate behavior in a positive unobtrusive way, she will save a great deal of time and effort later.
4. Discrimination Principle: "To teach a child to act in a particular way under one set of circumstances but not another, help him to identify the cues that differentiate the circumstances and reward him only when his action is appropriate to the cue." (p. 87)

To Maintain New Behavior

1. Substitution Principle: "To reinforce a child with a previously ineffective reward, present it just before (or as soon as possible to) the time you present the more effective reward." (p. 107)
2. Intermittent Reinforcement Principle: "To encourage a child to continue performing an established behavior with few or no rewards, gradually and intermittently decrease the frequency with which the correct behavior is rewarded." (p. 118)

Token Systems and Contracting

Two specific applications of reinforcement principles are token reinforcement systems and contracting. Token reinforcement systems use tokens that students earn for desired behaviors. The use of tokens is similar to the use of money in our society. Alberto and Troutman (1986) describe tokens as "transitions between primary reinforcers and the natural community of secondary reinforcers." (p. 208) Token systems can be used with one student, a group of students, or an entire class or students. Such systems are comprised of two things: the token itself and a back-up reinforcer. The token is awarded immediately upon the desirable behavior being displayed. The student saves up the tokens to exchange for the back-up reinforcers. Specific aspects of designing a token system are addressed in detail in Ayllon and Azrin's (1968) book, The Token Economy, A Motivational System for Therapy and Rehabilitation. A behavioral contract, according to Lundell (1972), "is an agreement between two parties which specifies (1) a requirement to be met, and (2) the consequences for the fulfillment of that requirement." (p. 3) Contracting places the contingency for reinforcement into a written document (Alberto & Troutman, 1986). Contracts are especially effective at the intermediate and secondary levels.

Steps in the Behavior Change Process

Walker and Shea (1984) delineate five steps in the behavior change process. Examining these steps will aid the teacher in conceptually understanding the behavioral approach and its application. The five steps are:

1. **Selecting a target behavior.** A target behavior is the behavior to be changed or modified. The behavior is normally selected by the teacher. It may be a behavior already in the student's repertoire and needs to be increased. Or it may be a behavior the teacher wants to develop. The target behavior must be observable. Walker and Shea advise considering the following dimensions when selecting a behavior for

modification: the overall number of behaviors needing modification, the frequency of the behavior, the duration of the behavior, the intensity of the behavior, and the type of behavior.

2. **Collecting and Recording Baseline Data.** A baseline recording is a measure of what the student does prior to initiation of a new set of behavioral program conditions; it is the preprogram status of behavior. The goal of baseline recording is to obtain a reliable indication of behavior strength. Information gathered during this phase is the foundation of the behavior change program. The most efficient and effective way to represent the information is with a graph. The number of observation periods needed to obtain a reliable measure of strength depends on the fluctuation and frequency of occurrence of the focal behavior. Typically, daily recordings of a week are sufficient (Hall, 1974).

3. **Identifying Reinforcers.** Considerations for selecting reinforcers have been discussed previously. Walker and Shea (1984) also suggest using an interview with the student, an interview with the teacher, and direct observation.

4. **Implementing the Intervention and Recording Intervention Data.**

5. **Evaluation.**

Advantages of the Behavioral Approach

There are many reasons to use the behavioral approach. A few of them are listed below:

1. The principles of reinforcement apply equally well to students of all ages and from all backgrounds (Charles, 1985).

2. The approach can be implemented by anyone trained in the basic behavioral principles.

3. A basic understanding of the behavioral approach ensures success with many other management techniques which incorporate aspects of the behavioral approach.

4. The behavioral approach can be implemented in school and home settings.

5. It is an optimistic approach toward behavior change. Since all behaviors are learned, the student can learn positive behaviors.

6. The clarity, specificity, and simplicity of behavioristic principles make them very attractive to educators (Newcomer, 1980).

7. The behavioral approach makes teachers accountable for behavior change. The result of such accountability is that parents, teachers, administrators, and the public can judge for themselves whether an approach is working or whether a change is needed (Alberto & Troutman, 1986).

Common Errors in the Use of Behavioral Principles

Teachers enthusiastically embrace the behavior approach; yet some become disillusioned and abandon the approach. Some errors in implementing the approach are:

1. Teachers may not spend enough time in the phases of identifying the target behavior and recording its strength. Many teachers rush into a behavioral program without really knowing the specific behavior they are modifying.

2. Some teachers may be inconsistent in reinforcing the student or may unknowingly reinforce thee wrong behaviors.

3. Many teachers select the reinforcers for the student based upon their needs as teachers rather than upon the student's past reinforcement history or deprivation state.

4. Some teachers expect too much too soon from the student in regard to behavior change. It is very difficult to extinguish old and comfortable behavior patterns. According to Newman (1961), "To ask BD students to relinquish their inappropriate tools for survival, regardless of how uneconomical, how unhappy, how inappropriate and self-defeating they may be, simply because we ask them to do so, is an absurd simplification of human processes. To any self-respecting BD child relinquishing these tools seems stupid, blind, and consequently enraging or ridiculous just as if we were to ask a man to jump from a plane using a parachute with a broken shroud." (p. 200)

5. Some teachers become disillusioned with the behavioral approach when the student backslides. Backsliding is characteristic of BD students regardless of which approach for behavior change is being used. Newman (1961) talks of the **convalescent emotionally disturbed child** and states, "Often when a child is over the major hump of disease, we tend not to allow him the margin for error and regression that we give any ordinary youngster." (p. 201)

6. Some teacher may understand only "bits and pieces" of the approach and attempt to implement it. A thorough understanding is necessary so the teacher can make appropriate adjustments in the student's behavioral program.

GINOTT'S EFFECTIVE COMMUNICATION

Ginott (1972) is best known for the solutions he offers to communication breakdowns that occur between parents and children. The basic premise behind Ginott's techniques is for adults to avoid attacking a child's character when correcting behavior or when confronting conflict. Ginott's techniques, as they relate to teachers, focuses on methods of communication that promote and maintain secure, humanitarian, protective classrooms for students.

According to Ginott the teacher and the self-discipline he or she exhibits is the primary factor influencing classroom behavior. One basic component of Ginott's techniques is using sane messages. These are messages that focus on the situation and do not attack the child's character. The philosophy is "be hard on the behavior and soft on the child." Teachers are responsible for modeling the behaviors they hope to see in the child and in the classroom. The Ginott approach is a strong teacher model. Ginott feels that teachers are the most decisive, powerful element in the classroom. Their effectiveness depends on their ability to establish an emotional climate that promotes learning. This would be a climate in which individuals felt respected and safe.

While Ginott's techniques are basically used with individuals the interaction that occurs between the teacher and child affects group behavior. The interaction sets an example or model for other class or group members. The quality of teacher-child interactions also serves to set the climate and tone in the classroom.

Special Considerations

In addition to sane messages Ginott identifies eight other approaches for dealing with student behavior. The following is a listing and description of each approach:

- SANE MESSAGES - Sane messages address the situation and not the child's character.
- EXPRESSING ANGER - Teachers should not deny human feelings such as anger. Teacher behavior should be genuine. Feelings should be stated clearly and firmly and avoid blaming and humiliation of others.
- INVITING COOPERATION - Dependency can create problems. Cooperation can encourage problem solving and increase independence. When students are provided the skills necessary to make decisions and then allowed to make them, independence and self-esteem increase.
- ACCEPTING AND ACKNOWLEDGING FEELINGS - Teachers are in a position to and responsible for assisting students to sort out feelings. Teachers need to withhold opinions and act as a sounding board for students. Ginott suggests that teachers add comments such as "How can I help?" when serving as a sounding board.
- LABELING IS DISABLING - There is no place in the classroom for labels. Labels tell students how to think of themselves which can mean students will believe the negative things about themselves and live up to them.
- CORRECTION IS DIRECTION - Misbehavior requires correction from the teacher. Ginott recommends directing as a way of correcting behavior. Directing may take the form of offering alternatives to the observed misbehavior.
- SARCASM - Teachers should never use sarcasm.
- THE PERILS OF PRAISE - Praise, when it is non-specific or insincere can be damaging. Praise should address specific behaviors. Productive praise recognizes a child's feelings and describes performance.
- DISCIPLINE - Discipline is a series of ongoing small steps toward appropriate behavior.

Ginott feels that a teacher's greatest responsibility to his or her students in regard to discipline is to be aware of their emotions and their students' emotions at all times. Ginott acknowledges that teachers will become angry, but that anger should be expressed in a calm, rational manner. The salvation of communication according to Ginott, between teacher and child, depends on learning to express nuances of anger without nuances of insult (Ginott, 1972).

Ginott recognizes that teachers will encounter unpredictable group behavior in the classroom and from the start needs to deal with it effectively. In addition to serving as a model to students in regard to communication and discipline, Ginott encourages teachers to focus on preventing misbehavior. He sites Kounin's (1970) group management techniques as strategies to implement in order to avoid misbehavior.

> "At their best teachers address themselves to a child's situation. At their worst, they judge his or her character and personality. This, in essence, is the difference between effective and ineffective communication."

GLASSER'S REALITY THERAPY

William Glasser developed the concept of Reality Therapy. Glasser's approach to treating behavior problems was a major change in direction in the field of psychiatry. Instead of focusing on finding the underlying causes of behavior buried in an individual's past or subconscious, Glasser focused on the present and particularly the reality of the present.

Reality Therapy was first implemented in therapeutic settings. It was then applied to the school setting with Glasser's work with juvenile offenders. Glasser's most influential work as it relates to education was his book, Schools Without Failure (1969).

Glasser's views and the basis of Reality Therapy is that all behavior is the result of choice. Anyone can be taught the concepts of Reality Therapy. An individual does not need to be a psychiatrist to implement the techniques. Therapy may be used by parents with children, teachers with students, and employers with employees (Glasser, 1972).

The principles of Reality Therapy should be implemented in a specific order though there will be some overlap. Glasser believes that when the principles are applied in a specific order that they are more understandable. The principles of Reality Therapy are:

1. INVOLVEMENT - In order for the therapy to work the teacher or therapist must be involved with the person he or she is trying to help.
2. CURRENT BEHAVIOR - Individuals can't gain successful behavior without being aware of current behavior.
3. EVALUATING CURRENT BEHAVIOR - Individuals must critique their behavior and judge whether or not it is their best choice of behavior.
4. PLANNING RESPONSIBLE BEHAVIOR - Once individuals decide their behavior is not helping them they may need help in determining more competent responsible behavior.
5. COMMITMENT - Once a plan is made an individual must be committed to implementing it and following through with the plan.
6. ACCEPT NO EXCUSES - When an individual does not fulfill his or her commitment or follow through with his or her plan, the plan should first be rechecked. It it is still valid the individual must recommit to the plan or state "I am no longer committed to this plan."
7. NO PUNISHMENT - The absences of punishment is as important as not accepting excuses for behavior.

In addition to learning the basic principles of Reality Therapy, Glasser says teachers must begin by striving to make school a good place to be where they provide support to students (Charles, 1985). He identifies eight roles that a teacher can play in providing support and establishing discipline with students:

1. Stress student responsibility.
2. Establish rules that lead to success.
3. Accept no excuses.
4. Call for value judgments.
5. Suggest suitable alternatives.
6. Invoke reasonable consequences.
7. Be persistent.
8. Carry out continual review.

While Glasser does not identify group management techniques he does support the notion of groups to change individual behavior. He also identifies the teacher as the key component in the successful facilitation of groups to change individual and group behavior.

GROUP MANAGEMENT TECHNIQUES

The previous approaches discussed focus on assisting individual students in behavior change or they could also be used in managing group behavior. The remaining approaches focus primarily on group management techniques. In order to understand these models more clearly it is important to have some knowledge and understanding of group dynamics. Both teachers and students benefit when positive interaction occurs in groups.

Benefits to the Child

- The BD child's problem is usually observed more frequently in groups as contrasted to situations in which the student deals one-on-one with the teacher or another student. If behavior can be controlled

in a group, a child is more likely to succeed in the general education classroom.

- Group management encourages interaction among students. Interaction affects how students view themselves and others.
- There is evidence of increased academic achievement when students are supported by a group.
- There is strong evidence that belonging to a group and positive interaction with group members increases self-esteem. (Schmuck & Schmuck, 1975)

Benefits to the Teacher

- It is easier to manage behavior in groups rather than each behavior separately.
- There is a greater likelihood for student success in the general education classroom when students can perform appropriately in groups.
- Group management promotes independence and encourages students to accept responsibility for how their actions affect others.

Two things commonly occur in classrooms that limit a teacher's ability to manage groups: (1) attention is not given to specific conditions that facilitate group management, and/or (2) teachers are not aware of or knowledgeable about what conditions need to exist. Attention needs to be given to the following before group management techniques can be effectively implemented.

- Goals for a group must exist. It is important too that while meeting group goals individual goals are also met.
- Management should occur through a structure.
- A friendly respectful climate needs to exist.
- Attention needs to be given to specific components of group dynamics.

Components of Group Dynamics

Redl and Wattenberg (1959) identify five specific components of group dynamics and how these can cause problems in the classroom.

- CONTAGIOUS BEHAVIOR - When deciding how to manage individual behaviors the teacher needs to consider if and how the behavior might spread.
- SCAPEGOATING - Scapegoating occurs when group members displace their anger or hostility on a weaker group member.
- TEACHER'S PET - If a group believes a teacher is favoring someone in the group, they may act with jealousy and resentment.
- REACTIONS TO STRANGERS - Unknown visitors increase tension among group members. Teachers need to note the group reaction when a stranger or new person enters the group.
- GROUP DISINTEGRATION - Groups, even strong groups, can begin to show strain in time. When this occurs, teachers should ask themselves a series of questions. (pp. 282-290)

Questions to consider when determining the appropriateness of individual and group management techniques include:

1. What is the motivation behind behavior?
2. How is the class (group) reacting?
3. How does it relate to interaction with the teacher?
4. How will the student(s) react when corrected?
5. Will it affect the group's behavior?
6. How will it affect the individual's future behavior?
7. How will it affect the group's future behavior?

EFFECTIVE TEACHER BEHAVIOR

Kounin (1970) is best known for the concept of the ripple effect which formed the basis for his group management techniques. Kounin found that handling the misbehavior of one student affected other students who were misbehaving—particularly the behavior of nearby students. This was known as the ripple effect. Kounin maintains that teachers should know what is going on in all parts of a classroom at all times. He called this phenomenon withitness.

Other basic concepts of Kounin's model talk about a teacher's ability to provide smooth transitions between activities, to maintain consistent momentum within activities, to maintain group alertness, to hold every group member accountable for a lesson and to avoid satiation. The following is a listing and description of each of these techniques:

- WITHITNESS - The ability to know what is going on in all parts of the classroom at all times.
- OVERLAPPING - The ability to attend to two issues at one time.
- MOVEMENT MANAGEMENT - Teacher's ability to move from one activity to the next smoothly and maintain momentum within the activity. Jerkiness, slowdowns, overdwelling and fragmentation hinder smooth movement. This does not refer to physical movement, but to the manner in which information is delivered.
- GROUP FOCUS - Teacher's ability to remain focused on the group effort. Group focus includes group format—organization of the group, group accountability—each student being responsible for the concept of the lesson, and attention—maintaining the group's attention.
- AVOIDING SATIATION - Ability to change an activity to affect the dynamics of the group in a positive way. When students become satiated (bored), certain behavior changes can result. In order to avoid satiation teachers need to attend to progress of the group, challenge the group, and provide variety in instruction and content.

Kounin contends that teachers have few opportunities to work with individual students on a consistent and long-term basis. The ability to maintain a concerted group focus is necessary in order for a classroom to operate effectively. Group focus is contingent on three things: (1) group format, (2) the degree of accountability of each group member, and (3) effective attention on group focus.

In addition to group format, accountability, and attention, Kounin identified one other component that affects effective group functioning. Satiation is the fourth component and ;contains within it three factors to which teachers must attend: progress, challenge, and variety.

Special Considerations

Kounin believes that teachers must deal with the entire class, subgroups, pairs of students, and individuals. These dealings may often occur at the same time. Kounin does not believe that a teacher's personality traits are particularly important to effective group management. The following seven tips are provided to assist teachers to manage groups:

1. Know what is happening in every area of the classroom at all times.
2. Be able to deal with more than one issue at a time.
3. Correct the appropriate target behavior before behavior "gets out of hand."
4. Use the ripple effect to your best advantage.
5. Initiate and maintain smooth and consistent momentum.
6. Maintain group focus through alerting and accountability.
7. Provide learning experiences that do not satiate students by paying particular attention to progress, challenge and variety. (Charles, 1985)

CHANGING YOUR BEHAVIOR

The teacher of the behavior disordered has much technology available to produce behavior change. However, technology is useless unless applied appropriately, and more fundamentally, unless the teacher can perceive the possibility for positive behavior in the student. To increase positive behavior the teacher must first believe the student is capable of emitting it. The real goal of behavior management is not for the student to feel "controlled" but to feel capable. Purkey and Novak (1984, p. 36) state, "The answer to the question of why a class succeeds or fails is likely to be found in the teacher's perceptions." They continue by saying, "Positive perceptions means viewing students as able, valuable, and responsible as well as seeing oneself and education in essentially favorable ways." Hall (1959, p. 32) talks of this process further by saying, "When teachers perceive their students positively they are more likely to involve themselves with their students, both personally and professionally, and a **doing with** as opposed to a **doing to** process often results."

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Chapter 5

MANAGING AND DECREASING UNDESIRABLE BEHAVIOR

Al Marshall, Ph.D.
Education Consultant
Child Psychiatry Services
University of Iowa
Iowa City, Iowa

Barb Woodard
Teacher, Behavioral Disorders
Iowa City Community School District
Iowa City, Iowa

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Chapter 5

MANAGING AND DECREASING UNDESIRABLE BEHAVIOR

Al Marshall, Ph.D.
Barb Woodard

INTRODUCTION

There is a wide variety of behavior management techniques that may be used in increasing appropriate or decreasing inappropriate behavior. This chapter provides information about them and suggests uses for them in special education classrooms for children with behavior disorders. Some basic positive classroom management practices are common to all efficient classrooms and will be mentioned briefly in this chapter. We will also present some of those used to influence children to interrupt misbehavior. These practices will include extensions of normal teaching, surface management and influence techniques, group management strategies, and environmental manipulations.

The later sections of the text will be devoted to discussions and examples of behavioral approaches, punishment, and timeout procedures that have frequent value in behavior disorder classrooms. We hope that this material may also have some value in other special education classes with children who demonstrate serious and resistant maladaptive behavior. No attempt will be made to discuss applications of these interventions in regular education classes, across combinations of regular and special settings, or in homes.

Some approaches described in this chapter include negative and aversive elements, but the reader is directed to use these interventions only following careful consideration of the general principles and procedures of the preceding chapter and within the context of subsequent chapters on social skills development, affective curricula, and self-control approaches. We have provided cautions and guidelines along the way and at the end of major sections. Though the children and some of the behaviors found in BD classrooms may require negative interventions at times, we feel that good teaching is based on a positive approach and emphasizes this positive approach through long-term goals of greater self-control and responsibility in children.

CLASSROOM PHILOSOPHY

All teachers employ behavior management techniques at some level and have some set of rules and expectations for their students. More than any others, behavior disorder classrooms and teachers need to have clear expectations and rules for appropriate behavior. Expectations are to be stated in language familiar to the students and in positive terms; rules are to include a statement of consequences. Minimal expectations must be met by all students, but differing expectations and variations of rules and consequences are appropriate for individuals within a BD classroom. Although individual children will have specific behavior management needs and require their own IEPs for behavior, there is greater economy and a sense of an orderly classroom when there is a shared framework. The components of this framework include aspects of many of the sections of this manual with emphasis on the preceding chapter.

We find that a graduated step program (e.g., Hewett, 1968; Hewett & Taylor, 1980; Kerr & Nelson, 1983) is particularly useful with younger and more immature children and for older students who have not yet demonstrated sufficient self-control skills. Steps or levels provide for the management needs of children with different degrees of self-control within the same classroom. They allow teachers the flexibility of tailoring rules and privileges to the priorities and progress of their students. The steps serve as good milestones and motivators for children as individuals and within the classroom, for teachers as reminders to reprogram management goals and for parents as feedback and encouragement. This format promotes the use of behavior change approaches from various rather than one theoretical perspective (Bauer, Shea, & Keppler, 1986). An informal step program may reflect interventions along a continuum of children's behavior on a self-control dimension (Nichols, 1984) or a continuum of teacher's behavior based on degrees of teacher intrusiveness or external-to-internal control (Wolfgang & Glickman, 1980). Step systems provide a clear rationale for allowing children to be treated differently within the same classroom while leading children naturally and systematically into greater degrees of self-management. A step system must take into account both the current behavior of the group and the optimal long-range behavior goals. Descriptions of the system should be presented to parents and children during orientation or entrance into a classroom using the system; references to the system should be made during parent and student conferencing and

IEP planning.

We believe that BD classrooms with structure, set rules and consequences, and step systems can be positive and encouraging even if it is necessary to employ some behavioral technologies, occasional aversives, and planned exclusions in specific situations. We suggest that the overall classroom environment and students' sense of belonging, security, growth, and self-esteem can be enhanced by experiences in such classrooms. We need to ignore silly, immature behaviors and self-stimulations that do not interfere with learning, but we need to move on to more powerful procedures when disruptions and distractions become problems. We need to catch inappropriate, disruptive, aggressive and rule-breaking behaviors quickly before they escalate.

A number of things can be done to increase the effectiveness of management plans designed to change and, particularly, to decrease inappropriate behavior. Counting frequencies, rating behaviors, and classroom observations are extremely important in identifying problem behaviors and evaluating the effectiveness of interventions. Behavior counts and observations provide objective, low-bias information to guide intervention and necessary modifications (see Chapter 2). Thorough planning, organization, communication and monitoring are essential in starting a new intervention. The steps involved in implementing and carrying out an intervention to decrease behavior problems run parallel to the procedure described in the preceding chapter for setting up a new behavior plan.

LEVELS OR HIERARCHIES OF INTERVENTIONS

Hierarchies of aversiveness, intrusiveness and external control have been devised for specific reinforcement, punishment and exclusionary techniques designed to decrease inappropriate behaviors. Foxx (1982) presents a "least restrictive treatment" model with three levels of intervention for use in decreasing the inappropriate behaviors of severely retarded and autistic persons. Procedures which involve no aversive or intrusive characteristics; e.g., reinforcement and satiation) are at Level 1. Extinction, nonexclusionary timeout and negative practice are at Level 2. Aversive and intrusive interventions (e.g., negative practice with manual guidance, physical restraint, overcorrection, exclusionary timeout) are at Level 3 and require student, parent, and administration approvals. Other hierarchy models include Wolfgang and Glickman (1980), Hewett (1968), and Nichols (1984) which were described above and apply to a broad range of behavior problem children throughout their school years. Interventions described in this chapter will often be introduced in sequence from least to most intrusive or controlling within major sections. Aversiveness may vary greatly from one application to the next for a given intervention. We ask our reader to attend more closely to the manner and spirit in which any intervention is applied than to any order or level. Some general guidelines are presented regarding interventions to decrease behaviors and some discussions of non-recommended approaches are included. Unfortunately, not all interventions can be described in detail. We have emphasized and provided examples for more useful approaches and where clarifications are helpful. Our reader may find the hierarchy models noted above or the assessment information noted below useful in choosing between the many procedures described in this material. We would also suggest the model presented by Gaylord-Ross (1980) in making intervention decisions for more extreme and aberrant behavior problems.

BASIC USES OF ASSESSMENT INFORMATION

The assessment or identification process for behavior disorder students in Iowa (Wood, Smith, & Grimes, 1985) provides wide-ranging information about environmental, behavioral and temperamental factors relevant to children placed in BD classrooms. While Chapter 2 describes in detail the process of moving from assessment information to programming, there are some basic factors we would like to mention here. Setting analysis information can tell us the conditions frequently associated with children's behavior problems and can be used in designing the initial IEP behavior goals. This information should be used in a program that will gradually introduce stressors that simulate the events in the regular education environment that led to behavior problems and BD placement. Failure to show progress in the BD classroom should lead to a formal reassessment of this setting along similar procedures (Miller, Epps, & McGinnis, 1985; Carroll, 1975). Assessment information should describe target behaviors for potential intervention. Careful review should also give us an idea of the presence of more mature and positive behaviors in a student's repertoire which we can use in discrimination training and differential reinforcement interventions.

Behavior Disorders Clusters

The behavior disorder "cluster" of an individual student can have implications for programming. Four clusters are described in the Iowa definition of behavior disorders and are described in Chapters I and II of the training manual by Wood, Smith, and Grimes (1985). Cluster I behaviors of aggression, disruption, and impulsivity are likely to require techniques to increase and decrease behaviors in addition to other approaches. Cluster II behaviors of social withdrawal and anxiety are more likely to suggest the use of desensitization, relaxation, guided imagery, social skills training, and affective interventions. Cluster III children suffer from deviant thought processes. While increasing and decreasing approaches may be useful, cognitive-behavioral, self-control, social, and environmental manipulations may have the most important long term impact. Despite the seriousness of the problems in this cluster, educators must continue to respect student choices and the preferences of their individual temperaments. These students are often older and more in need of opportunities to individuate and become more responsible for themselves. A useful perspective for intervention is to recognize and choose target behaviors that are of concern to the students themselves.

Cluster IV students are frequently described as autistic. Despite the fact that this is a pervasive and chronic condition, behavior disorder professionals need to avoid the pitfalls of thinking that this disorder is always crippling and the characteristics immutable. The newly revised definition of DSM III-R includes many higher functioning children with moderate to mild degrees of handicaps in various social, language, learning, and behavioral areas. While some of these students will require management techniques to decrease aggression, disruption, impulsivity, and some self-stimulatory behaviors during instructional activities, others may require very little attention of this type. The major approach will continue to be educative, facilitative, and positive. Teaching needs to be precise and focus in social, language, and cognitive problem-solving areas. Behavioral technology when applied should be fashioned to avoid questionably high levels of intensity, aversiveness, and external control. Values behind behavior change rationales need to be examined. And for those children often least aware of their individuality and rights, we must take special care in their behalf. Interagency communication, team cooperation, and active parent involvement are especially important here.

Assessment Information with Groups

Information gathered about individual children in a behavior disorder (BD) class has many uses in designing curriculum and setting up a classroom management system. This information has less clear use in arranging for the use of differential reinforcement, punishment, and exclusionary procedures. Interventions of these types should be applied on an individual basis and monitored during their process by analyzing their effects on individuals rather than the group. Though members of the group may share a similar plan incorporating a punishment, the decision to employ it should be determined by an individual decision process. This does not preclude the use of loss of privilege or mild aversives often employed by most teachers or the use of approaches coming under the heading of "prerequisite procedures."

Evaluation of Interventions to Decrease Behaviors

Interventions of the nature discussed in this chapter must be chosen and employed cautiously. As a decision to initiate such plans should follow analysis of the ecology of the behavior problem and gathering data on rate, the same sources of information are necessary to monitor progress and to evaluate effectiveness. The following factors are suggested for consideration in planning an evaluation of interventions: behavior counts and/or observations; behavior ratings; decision lines or criteria for continuation, alternation, or discontinuation; direct and defined involvement by the support team in monitoring or managing the intervention; time line and review meetings set; monitoring and analysis of secondary effects (e.g., effects on non-targeted behaviors, self-esteem and affect of child, the group process of the class); and criteria for moving to self-management or phasing out the plan.

PREREQUISITE APPROACHES

Extensions of Normal Teaching Style

Managing students' behavior in a group setting is a necessary function of every classroom teacher. In a regular education classroom, discipline or behavior management techniques may be so subtle as to appear nonexistent. In difficult circumstances, regular classroom discipline may range from verbal directives to removing a student from the room. The same range of techniques is applicable in a discussion

of discipline in BD classrooms, however, discipline in these classes is often a carefully monitored top priority. Continuous attention to management techniques is required beginning with very low-key interventions. Viewing these management techniques as extensions of the normal teaching style is particularly relevant in the BD classroom environment where behavior management is an integral part of the learning process. Discipline is a curriculum area which aims to prepare BD students for behavioral self-sufficiency in a regular classroom if possible.

Arrangements, Scheduling, and the Planning Network

Sound planning based on IEPs and recent assessment information is a necessary first step in developing a management overview for a class of BD students. Carry-over IEPs outline the path of a student toward behavioral and academic goals. A review of the IEPs can suggest the "personality" of the class and environmental arrangements, academic grouping, and scheduling that can reduce the opportunities for inappropriate behavior. These steps assure the maximum opportunity for academic progress in the BD classroom or during mainstreaming in regular classrooms. Information from IEPs and assessments can also be used to construct an academic and disciplinary support network within the school, among community agencies and with parents.

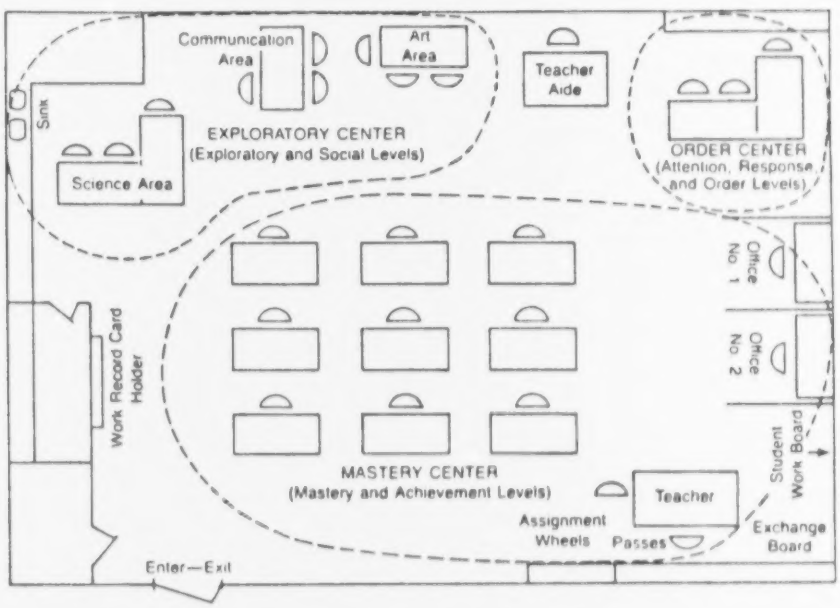
Miller, Epps, and McGinnis (1985) underscore the importance of the learning environment. The relative fit of students to their environment is the purpose of "setting analysis" (p. 61). Such an analysis becomes one of the bases for implementation and documentation of behavioral management strategies. Planning the use of physical space, student groupings, daily schedules, and basic rules provides classroom structure. This is what Kerr and Nelson (1983) refer to as the "range of antecedent variables that the teacher may use to control pupil behavior" (p. 89). A consideration of this range of variables for structuring is prerequisite to planning specific interventions for the reduction of inappropriate behavior. Our reader is referred to Miller, et al. (1985), Carroll (1975), and Stainback, Stainback, and Froyen (1987) for more extensive information than we have provided.

Physical Space

Classroom space is a fixed commodity so planning must consider flexibility in relation to: the number of students that will be in the room, the number of activity spaces, the seating proximity of students

Figure 1

Floorplan of an Engineered Classroom



From "Educational engineering with emotionally disturbed children" by F.M. Hewett (1967), Exceptional Children, 33. Copyright 1967 by The Council for Exceptional Children.

in relation to their behavior, and space for the separation of one or more students from the rest of the group for an activity or following a problem situation. In addition, there must be space for students and teachers to have easy access to all areas of the classroom. Classroom space apparently lost to furniture and activity areas can be regained through judicious planning for multiple uses. As Hewett (1967) suggests, the planned use of a classroom must be precisely engineered to accommodate the full variety of curriculum including behavior. The following illustration presents an arrangement in which variety of activity may be maximized.

Grouping

Current research provides no solution to the problem of grouping students to achieve maximum effectiveness in establishing and maintaining discipline. Heterogeneity in the group is often conducive to a variety of strategies for behavior management. Since the BD teacher rarely has much direct input in the composition of the class, grouping for reduction of inappropriate behavior is subject to experimentation. Initially, the teacher must rely on IEPs and records to plan initial groupings. For example, one would group students for the purpose of seatwork according to their relative self-governing abilities; for academic purposes, according to their level of skills and interests; and, in instances where academically advanced students may serve as "helpers," one could make other groupings in specific subject areas. As part of the total environmental arrangement, grouping for reduction of inappropriate behavior will be subject to continuous adjustments.

Daily Schedule

As part of prerequisite planning, regular daily routines in the order of the subjects and the general activities should be the primary goal of the daily schedule. Routine provides security for students and, as stated in later context, it is often a "safety valve" for prevention of certain types of behavior escalation. Hewett (1968) suggests beginning each day with a warmup exercise to get students settled and ready to work. Schedule the least enjoyable tasks early so that more pleasant activities serve as reinforcers or relief from more intense activities. A key consideration is that the routines of the daily schedule should be planned with an eye for balance and for variety to prevent boredom.

Rules

Rules are verbal statements meant to regulate behavior. They should be constructed to inform students which behaviors will be tolerated and which will not. Students who follow rules should be praised and reinforced, while students who break rules should not. Rules also serve the teacher as reminders as to which behaviors will be followed by which set of consequences. Rules can help teachers and children cope with stressful and complex environments (Rich, 1982). The reader may be aided by some guidelines for establishing rules:

1. Five or six rules are enough; use the fewest possible number. It is difficult for students to remember too many rules, especially when they are very specific.
2. Different situations may require separate sets of rules. Since certain behaviors are appropriate in some situations and not in others, different sets of rules will help students make discriminations.
3. Make rules that are short and clear for ease in comprehension and recall.
4. State rules behaviorally and in enforceable terms. The rule, "Show respect for others," is ambiguous and invites discussion or multiple interpretations about what is meant. "No talking in the restrooms" is stated behaviorally but is unenforceable and may encourage testing limits and tattling.
5. State rules in a positive manner if possible. "You may talk quietly in the restrooms" would be a superior rule to the example above.
6. Rules should be reasonable and necessary. Rules that cannot be met lead toward alienation or giving up. Unnecessary rules are time consuming and unsatisfactory for everyone.
7. Be clear and consistent about the link between rules and the consequences for infractions. To be most effective, rules and consequences should be posted for students to learn or, at least, be available for easy access. Review rules regularly with young children. Develop rules through a class meeting process with older children. Threats or lectures as consequences of rule violations often lead to power struggles or other escalations of inappropriate behavior.
8. Review rules regularly with students. Class meetings and openings are good occasions for a review of rules. Transitions are good spots for reminders.

For additional readings about rules, see Kerr and Nelson (1983), Alberto and Troutman (1982), Madsen

and Madsen (1974), and Worell and Nelson (1974).

Planning Network

While the teacher is the leader in all matters of behavior management in the classroom, a network of parents, school administrators, and support staff is a necessary resource in working to reduce inappropriate behavior in BD students. Early conferencing with parents can provide an opportunity to develop a trusting relationship and mutual support. In some cases the home may be another setting in which a child's appropriate behavior can be observed and reinforced. Teachers' expectations of parents should be limited to assistance with specific tasks. Parents cannot be expected to solve school discipline problems at home. With the aid of the BD teacher and support team, parents can be effective supporters and co-operaters in behavioral interventions.

School administrators can offer a variety of assistances with BD students. In order to participate most effectively in the teacher's network, they must be informed about the behavior and needs of children in the classroom, general management techniques and the teacher's expectations of their support roles. Principal participation in non-crisis and crisis situations needs to be defined.

The planning network is exhibited in weekly team meetings at which the principal, the BD teacher, mainstream teachers, and all resource personnel gather to review academic and behavioral management plans and to make progress reports. Parents and children can also attend team meetings when they are devoted to a single child. When home conditions appear to be sustaining problems, parents and parent support professionals must be involved if at all possible. Information exchanges, home-school management coordination, determination of needs for assistance from support team members to the family, and discussions of special programming needs are discussed.

As a prerequisite approach, network planning is an opportunity to structure resources external to the classroom. It is an attempt to construct a support system to assist in the maintenance of academic and behavior management plans.

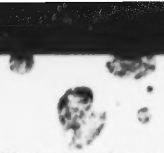
BEHAVIOR MANAGEMENT APPROACHES

A smooth running class and positive learning environment are important goals for BD teachers. Modeling appropriate behavior and problem-solving strategies, using peer models to demonstrate appropriate behavior, imparting information to students about expectations and how to behave appropriately, and influencing classroom interactions in constructive ways are continuous and key activities for these teachers. This role makes it imperative that the BD teacher employs surface management and influence strategies, group management skills, knowledge of the group to help manage individuals and the principles of behavior, and social learning on a daily basis. Success with these techniques improves BD classroom behavior and greatly facilitates the teacher's academic mission.

Surface Management or Influence Techniques

Redl (e.g., Redl & Wineman, 1957) is generally credited as the source of surface management or influence techniques. These interventions are for use when inappropriate behavior is minimally disruptive on the surface but could lead to escalated behavior or emotional level. Clarizio and McCoy (1976, 1983) divide influence techniques into those supporting self-control, those involving task assistance, and those related to reality and value appraisals. The following techniques are characterized by their effectiveness in intervening to reduce the likelihood of extended acting out or in preventing a minor behavior problem from becoming a major one. In support of self-control:

1. "Signal interference" involves a repertoire of mostly nonverbal cues that gain children's attention and communicate disapproval. Finger pointing, "cool" stares, chalk tapping, or a quiet knock on objects can signal the child that the teacher wants more appropriate behavior to be resumed. The verbal cues for this category are minimal and meant to elicit a calming effect: softly calling a student's name, softly naming the task to be resumed (Tanner, 1978) and coughing or clearing the throat (Long & Newman, 1980).
2. "Planned ignoring," as the name suggests, is a conscious ignoring of minimally disruptive behavior. Teacher judgment is critical in such cases for it must be determined whether the behavior is a bid for attention or whether the behavior is a prelude to protracted acting out. Three clues are helpful in making a judgment to ignore behavior: (a) when the breach of conduct appears momentary, (b) when the appropriate behavior is neither serious nor dangerous and (c) when drawing attention to the behavior or the incident could interrupt the learning environment (Tanner, 1978).



3. "Interest boosting" is employed to re-engage a restless student whose attention begins to wander from the task at hand. By showing interest or sharing an interest in the student's work, the teacher is able to renew the student's interest and to facilitate completion of the task.

4. "Tension decontamination through humor" (Long & Newman, 1980) is used to relieve tension in an anxiety-producing situation. Many times the injection of humor inhibits student discomfort or aggression. It is important to note that any hint of sarcasm in the humor may elicit overt or covert aggression or hostility from BD students.

5. "Diversion" is a technique used to distract the student from objectionable pursuits by redirecting attention toward more desirable activities. Frequently, this can be accomplished by asking a question. This provides an interruption of the inappropriate activity and channels the student's energies toward more acceptable behavior or pursuits.

6. "Proximity control" (Tanner, 1978) entails the teacher moving toward a disruptive student. Often the motion itself is intervention enough. Sometimes the teacher's move to stand silently by the student helps the student to resume concentration. Proximity can be achieved by having the student bring work to the teacher or to the chalkboard. Proximity is also an effective strategy when the teacher moves a student from a problem situation to a position in the path of the teacher's gaze.

All of the above techniques are meant to support self-control and are used to prevent relatively small incidents from becoming more difficult ones. The key is to "nip things in the bud." They are subtle techniques to provide the first-step intervention at minimum expense of energy and authority. The teacher's use of them is not apt to arouse counter-hostility and is apt to facilitate the self-regulation of student behavior. Influence techniques are of limited value in situations where students have limited self-control or once misbehavior becomes contagious. Timing is critical.

Techniques for task assistance are in the second category of influence techniques. These are used when social and academic demands are too much for a student. When efforts yield no positive results, frustration and inappropriate behavior can follow. Manipulating external barriers to learning can help the student have a successful experience. Task assistance techniques include:

1. "Hurdle help" is employed when a student is frustrated by an assignment. Lack of understanding causes frustration and anxiety, particularly when the child witnesses classmates working diligently at the same task. The frustrated student may exhibit a variety of behaviors which distract others. Rather than focus on the inappropriate behavior, a perceptive teacher will offer the student assistance with the task. As a preventative measure the teacher should analyze the total environment to ensure that each student is employing the appropriate skills to the assignment.

2. "Restructuring the learning environment" is a technique used when students become bored or overly excited. A restless student might be required to role-play a book report rather than read it. A student who becomes over-stimulated or excited may need to switch to reading or an activity packet at an order center (Hewett, 1968). Restructuring the learning environment may be employed for one student or for the entire class, but it requires that students have tolerance for abrupt change or redirection of their efforts.

3. "Routines provide structure." Often they are "safety valves" for both aggressive and withdrawn children (see Daily Schedule above).

4. Prevention is worth a pound of cure. "Removing seductive objects" that may be irresistible to students with inadequate behavioral controls eliminates an opportunity for distraction and misbehavior. Any material which tempts students should be removed from the learning environment when not in use.

5. "Antiseptic bouncing" can be used to interrupt deteriorating behavior by removing the affected student from the classroom for a brief period. The classic example of antiseptic bouncing is to send the student on an errand to the office with a sealed note explaining the situation and the student's need for a brief cooling-off period to regain self-control.

A third category of surface management and influence techniques are teacher appeals to relate a given behavior to "reality and value appraisals." Clarizio and McCoy (1976) offer a list of excellent examples in this category:

1. An appeal to a personal relationship between the teacher and the child; for example, "Jim, that noise bothers me."
2. An appeal to reality implications; for example, "You can get hurt by doing that."
3. An appeal to conscience; for example, "You're not that kind of child."
4. An appeal to group codes; for example, "I don't think the other fellows would like that."
5. Appeal to pride in personal improvement; for example, "You'd feel better if you get your assignments

done right."

6. Appeal to hierarchical limitations; for example, "I can't always stop you from fighting, but I do have to notify the principal." (p. 489)

As with any influence technique, appeals to reality and values can be overworked. If used sparingly, however, these appeals to reality and values can impress the seriousness of a situation upon the student. Such appeals are not useful when a student doesn't share an appealed value. The reader is referred to Long and Newman (1980) and Clarizio and McCoy (1976) for additional readings on surface management and influence techniques.

Principles of Behavior Analysis

The process of behavior analysis is distinct from surface management techniques described above. Surface management is used without extensive attention to understanding the misbehavior or the environment which precipitates or reinforces that behavior. In short, these techniques do not go far beyond the surface. Behavior analysis, on the other hand, implies an interest in understanding behavior, in going beyond the surface to understand the functional relationship between behavior and the environment. It examines the stimuli that precede and follow the behavior. The model of this analysis is presented as A - B - C. A is the Antecedent stimulus that precedes Behavior B; and C stands for the stimuli that follow as Consequences. In this scheme, the consequences of behavior are predictable. Used properly, behavior analysis techniques are a valuable set of tools for the BD teacher (Kerr & Nelson, 1983).

As a precursor to the use of various behavior management interventions, one should review and become familiar with the principles of behavior analysis. Six important principles are discussed by Kerr and Nelson (1983):

1. "Behavior is controlled by its consequences" (p. 81). This principle is the centerpiece of behavior analysis. A common sense assumption is that behavior is controlled by antecedent events, but consequences affect behavior in one of three ways: (a) they strengthen or increase the frequency of the behavior they follow, (b) they weaken or decrease the behavior they follow, or (c) they maintain preceding behavior at the previous level.

2. "Behavior is strengthened or maintained by reinforcement" (p. 82). Positive reinforcement has occurred when the consequence strengthens or maintains behavior over time. Negative reinforcement has occurred when the termination of an aversive stimulus strengthens or maintains behavior over time.

3. "Behavior is weakened by removing the consequences that have been maintaining it" (p. 82). The removal of reinforcing consequences is a process known as extinction. While extinction bears a resemblance to "ignoring" or "planned ignoring," it is used more systematically and precisely.

4. "Behavior is also weakened by punishment" (p. 82). The two kinds of punishment are applying aversive consequences and removing positive consequences immediately after a response. The aversive consequence might be a verbal reprimand for being out of one's seat. The loss of a positive consequence might be the removal of a token or recess time for being out of one's seat. In extinction a reinforcer is withheld; in punishment a negative consequence is added which reduces the rate of the behavior.

5. "Consequences must consistently and immediately follow the behaviors they are meant to control" (p. 83). Promptness and consistency are the hallmarks of any successful behavior management system. Our reader is referred to Kerr and Nelson (1983), Alberto and Troutman (1982), Clarizio and McCoy (1983), Tanner (1978), and Worell and Nelson (1974) for readable reviews of behavior management principles and general techniques.

Behavior Management and Groups

Group management systems have been strongly influenced by Skinnerian operant behavior principles. As a consequence, one of the most widely used systems of group management in the BD classroom is the token system and its variant, group-planned contingencies. Students may earn tokens (points) as reinforcement for appropriate behavior. Tokens are exchanged later for back-up reinforcers. To be used most effectively, the system requires that both tokens and verbal praise be used as reinforcers. While the tokens are concrete and additive, verbal praise will gradually come to serve a similar function in reinforcing appropriate behavior (Kerr & Nelson, 1983). Group management systems are flexible. They may be applied to intact groups of students, to individuals within the group or to any combination. Thus, two students may receive the same number of tokens for performing different tasks or for reaching different criterion levels. Within such a system, individualization is accomplished by adjusting reinforcement contingencies. The same conditioned reinforcer is given to all students but for different behaviors or

on different reinforcement schedules.

Token system essentials include tokens, back-up reinforcers (tangible objects or activities) for which tokens may be exchanged, contingencies specifying the conditions under which tokens may be obtained or lost, as well as the exchange rate of tokens for back-up reinforcers, their value derives from association with previously established reinforcement consequences. Students can be taught the value of tokens by pairing the presentation of tokens with an existing social or tangible reinforcer. When associations become strong, the teacher can fade out the paired reinforcer, delay token exchanges, and make earning additional tokens contingent upon the exhibition of desired behaviors.

"Token systems are powerful behavior management systems, but they do not necessarily take into account the dynamics of children in group settings" (Kerr & Nelson, 1983, p. 96). Contingencies related to group characteristics do take advantage of social reinforcers controlled by the peer group and are adaptable to many situations. From an efficiency perspective, group-oriented contingencies also reduce the number of individual consequences the teacher must deliver.

Litow and Pumroy (1975) list three classifications of group-oriented contingencies: dependent, independent and interdependent. In the first, the consequence for the whole class depends on a specific child's performance or behavior (e.g., the class might earn a popcorn party if Pete can go for the day without a temper tantrum).

With independent group-oriented contingencies, the same consequence is presented to each class member based on their performance or behavior. Individual children may have contracts specifying personal criteria for receiving the consequence. This approach fails to take advantage of the group's influence on individuals because of individual payoffs, but this may be an advantage if peer pressure is expected to take a negative form.

In interdependent group-oriented contingencies, consequences occur for each member of the class upon reaching a criterion or for each member of the class when the group reaches a collective criterion. The consequences may be either positive or negative. The well-known "Good Behavior Game" is an interdependent group-oriented contingency:

> A class is divided into two or more teams and each team accumulates marks which are written on the chalkboard indicating that a target behavior (desired or undesired, depending on the contingency) has occurred in the team. At the end of the day, the team with the most (fewest) marks gains a privilege. (Kerr & Nelson, 1983, p. 97)

Tanner (1978) states that the group can be a powerful force against misconduct. Often burned by the scornful look of classmates, pupils will stop clowning and pay attention because they are anxious to get back in the good graces of their friends. However, an alliance between the teacher and the class can be that much more powerful. When the teacher makes the point that she has the class behind her, misbehavers often come quickly into order:

> Everyone was in line for lunch except James and Richard who were in the back of the room, arms akimbo, posed unmistakably for a fight. James was dancing around Richard as Miss Jones, who had her hand on the doorknob, said, "James. Richard. You're holding us up. We're hungry and we'd like to go to lunch." She was echoed by a chorus of, "James, come on. Richard, come on. Cut it out you guys. We want to go to lunch." James and Richard dropped their hands to their sides and ambled over. (Tanner, 1978, p. 169)

Miss Jones communicated to the class that James and Richard were holding everyone up and communicated to the boys that she was displeased with them. The group imitated her model and applied pressure to them to get with the group.

Pitfalls can occur when certain problem students are oppositional or unresponsive to the group's interests. Teachers must be alert to the power and negative effects such a student can have when interdependent group contingencies are employed. Kerr and Nelson (1983) describe five general research conclusions regarding class management:

1. Total management packages appear more effective than separate components or combinations of components . . .
2. The most important component of management systems is the application of contingent extrinsic consequences . . .
3. Reinforcement and response cost seem to work equally well . . . although this may not be the case if teacher attention accompanies the removal of reinforcers . . .
4. Group-oriented contingencies seem as effective as individual contingencies and are more efficient to administer . . . however, negative peer interactions with group contingencies are possible . . .

5. The optimum management package, particularly for highly disruptive students, appears to be a combination of group and individual contingencies . . . (p. 102)

Extinction

Extinction has been defined as the "weakening of a learned response that is produced when the reinforcement that followed the response no longer occurs" (Wicks-Nelson & Israel, 1984, p. 338). More powerful than ignoring, extinction is an abrupt withdrawal of the positive reinforcement maintaining a behavior. Teacher attention is often the reinforcer that is thought to maintain some misbehavior, though this may be difficult to judge without the help of someone else observing student-teacher interaction. All sources of reinforcement may not be easily identified, and it is crucial that the teacher is able to cut off all sources of reinforcement for the behavior to be extinguished.

A combined use of extinction and positive reinforcement makes an excellent strategy. Clarizio and McCoy (1976) noted that "extinction removes . . . the payoff for unacceptable behaviors whereas positive reinforcement increases the probability that an acceptable behavior will replace the extinguished behavior" (p. 507). Extinction has been used with a variety of behaviors including talking out, temper tantrums, aggression, crying, arguing, and baby talk. To be effective, extinction must be carefully planned, defined, measured pre- and during-intervention, and practiced (Hall & Hall, 1980).

Extinction may be a most difficult strategy to implement and there are a number of risks or limitations. Any uncontrolled or unapparent source of reinforcement may negate the extinction plan. The effects of even the best extinction plans are rarely immediate, and often there is a temporary increase in deviant behavior rates called an "extinction burst." If an extinction plan is not working or terminated too early, the intervention may actually make the behavior problem worse. In some cases, new inappropriate behavior may appear. It takes an extremely well-controlled and consistent teacher to be able to tolerate an extinction program, and in some cases "spontaneous recovery" of the misbehavior may occur even months after it has been extinguished. On the positive side, extinction is non-aversive and does not require a great amount of teacher time during the intervention.

Modeling/Peer Models

The use of modeling and peer models to decrease inappropriate behavior has been well documented and described (e.g., Bandura, 1977; Strain & Fox, 1981). It has been used frequently with BD children and is a major component in many social skills training curricula that have been developed in recent years (see Chapter 6 on social skills). Audiovisual, videotape, and videodisc technologies have all made major contributions to modeling training materials. In the larger sense, teachers demonstrate or model throughout the day appropriate language and behavior that can be imitated by students (Meichenbaum, 1977).

A more immediate use of models in decreasing inappropriate behavior is for the teacher to make use of the appropriate behavior of non-target students. The teacher reinforces those students for displaying appropriate social or academic behavior within the view of others (see Chapter 3 on increasing behavior). Target students notice and begin to decrease inappropriate behavior and imitate the reinforced behavior. This approach is particularly effective when models are similar to targets, high-status, same sex, and popular (Alberto & Troutman, 1982; Clarizio & McCoy, 1983). Unfortunately, models of negative behavior are similarly influential. Peer models must be chosen wisely and may be more effective if they are given some specific rules and suggestions for interactions and formal modeling responsibilities.

Differential Reinforcement Procedures

Differential reinforcement approaches are widely used alternatives to punishment and exclusion. These straightforward techniques simply involve positive reinforcement of the absence of a target misbehavior. Although there are several parallel techniques and different terms, they can all come under the heading of Differential Reinforcement of Other Behavior (DRO). The other terms describe subtle variations of the same general principle: DRA - Differential Reinforcement of Appropriate Behavior, DRI - Differential Reinforcement of Incompatible Behavior, and DRL - Differential Reinforcement of Low-Rate Behavior. All of the DRO approaches can be viewed as an extension of common discrimination training.

DRL approaches reinforce children for surpassing a minimum amount of time prior to the occurrence of the target behavior or for having a rate of target behavior below a criterion. DRL has the advantage of allowing for continued emission of some behavior which may be appropriate at lower rates while inappropriate at higher rates. Sharing information in class is appropriate at a reasonable frequency;

dominating discussion is not. An occasional interruption may be tolerable; constant interruptions are not.

DRA and DRI work similarly. They may be used with time schedules or on the occurrence of a specified incompatible or appropriate response. They may also be used per trial during formal instructional activities. DRA is generally based on reinforcement of a student who has passed a given time without the occurrence of the target behavior. The time period chosen is most often set at half the average interval between target behaviors based on rate data. Careful choice of an incompatible behavior to be reinforced generally leads the DRI approach to be more powerful than DRA procedures. A disadvantage of DRI is that it is often difficult to identify environmentally relevant incompatible behaviors. These procedures can be time consuming for a teacher, therefore they are frequently scheduled at specific times and during activities which are incompatible with the inappropriate behavior (Play Dough would be a good activity for a DRI intervention on masturbation; watching Sesame Street would not).

DRA: Charlie frequently hit other children during center time. Ms. Smith recorded an average of four reports and six observations of aggression during Charlie's 1-hour center period over three days. Not all hits were serious and non vicious; vicious hits were much rarer but an extreme concern. Ms. Smith told Charlie about her study and suggested they work on his hitting together. Between them they decided that free time working on a class puzzle was a powerful and available reinforcer. Ms. Smith told Charlie he would be given a ticket for three minutes of puzzle time for each 5-minute period he went without hitting someone (60 minute center/6 aggression average 10 minutes/aggression; 10/2 5 minutes). Ms. Smith had the opportunity to watch Charlie fairly closely and so chose not to use peer reports or some combined data. She set the timer at 5-minute intervals. When the timer rang, Charlie marked his own token. When Charlie hit someone before the time rang, Ms. Smith reset it to five minutes. Charlie's rate of hitting during centers dropped to an average of two per hour over two weeks and these were all in the nature of "horsing around." Ms. Smith chose not to add a penalty for hitting which might have reduced the rate further. She chose instead to increase the time interval to 15 minutes (60 minutes/ 2 aggressions = 30; 30/2 = 15 minutes) while setting the tokens for free time at five minutes. Charlie's continued success led Ms. Smith to operate the program only on Charlie's two most difficult days with 10 minutes of non-contingent puzzle time for the other three days.

DRL: Lola's self-deprecations of her skills and abilities were driving her new teacher, Mr. Jones, and her classmates crazy. Her frequent whining putdowns of her own appearance, intelligence, popularity, and work began to elicit similarly negative comments toward her from others. The psychologist's sociogram and self-esteem inventory substantiated Mr. Jones' concerns about Lola's adjustment. Mr. Jones felt that this behavior was most frequent during science and social studies activities where there were frequent small group projects and activities. The psychologist found that there were an average of 16 self-deprecations for each of these 48-minute classes over two days. Mr. Jones felt that occasional remarks self-deprecating one's skills could be regarded as normal modesty but these were too many. Mr. Jones expressed his concerns to Lola who agreed to work with him and the psychologist. The psychologist talked with Lola about the nature and identification of self-deprecations. He then developed some practice activities for Lola to code. Lola used a "countoon" as a self-recording form (Alberto & Troutman, 1982; Jones, 1980; and Chapter 8 on self-control) while the psychologist or teacher counted separately in spot checks. For each class period when Lola uttered and recorded three or fewer self-deprecations, she was given the opportunity to select from a menu of five reinforcers and reinforcing activities she had identified. Had not Lola been honest and accurate in her self-recording, Mr. Jones would have had to keep the record or have had to move to a more sophisticated "reinforced self-evaluation" approach.

DRI: Tony, a 9-year-old autistic child, spent much time flipping rapidly and repeatedly through the pages of a classroom encyclopedia. Despite the fact that it was not interfering with Tony's work, Mr. Block pointed this behavior out to Tony's mother during the fall conference as a concern and an irritant. Tony's mother reported that he behaved similarly at home with the phone book and similar items. She said she was unconcerned about the behavior herself as it did no harm, and he was easily distracted from the activity when there was something more interesting to do. Rather than developing a DRI program to reinforce more appropriate book-looking and page-turning, Mr. Block gave Tony the free time option of page-flipping in a out-of-the-way corner where he was out of Mr. Block's vision or the option of choosing from a

list of three exploratory activities. Tony's choice for free time was most often one of those activities but was occasionally page-flipping. When Mr. Block brought in a terrarium a month later, the page-flipping problem was forever resolved in Mr. Block's class.

DRO and its related techniques have frequently been used with severely handicapped individuals often with retardation and autism. The instructional trial format and student-teacher ratio of such classes lend them to the DRO usage. These reinforcement techniques do have much broader utility, and the examples above hint at some wider uses.

DRO approaches offer a non-aversive alternative to reducing inappropriate behavior but they have limitations. DRA and DRL have frequently been found to decrease rates of inappropriate behavior by 50 percent or more, while RI procedures have frequently been found to achieve 80 percent drops in rates. In some cases levels of behavior continue to be too high, and the specific DRA and DRL techniques lack the reinforcement specificity to expect greater results (cf. Foxx, 1982; Alberto & Troutman, 1982). Greater power can be gained by yoking a DRO approach with response-cost, punishment or behavioral self-control techniques. On the positive side, DRO gains have better characteristics for building towards maintenance and generalization programs and avoiding possible negative side-effects that are often incurred with the use of punishments (Wood, 1978; Rutherford, 1978). Our reader is referred to Deitz and Repp (1983) and Foxx (1982) for more detailed summaries of DRO procedures.

PUNISHMENT AND AVERSIVE CONSEQUENCES

Our emphasis has been on positive reinforcement and non-aversive behavior management techniques thus far, but there are times when punishment is required to decrease inappropriate behavior. Punishment was defined earlier as either the unpleasant consequence that follows a behavior or the loss of a pleasant consequence resulting in a decrease in the rate of the behavior. This section will describe a variety of punishment interventions that have been used in BD classrooms. An attempt has been made to present them in a sequence from least to most aversive, although there have been some exceptions made in order to group and compare related techniques. Guidelines for selection and use are discussed, and the section concludes with a general discussion of the uses and limitations of punishment followed by some guidelines for employing punishment interventions. While planning and prior to the use of any punishment approaches described here or elsewhere, BD teachers should review school and district guidelines for the use of punishment and other potentially aversive techniques. If no policy exists, planning should proceed to develop one. Suggestions for this process have been discussed by Wood and Braaten (1983).

Verbal Negatives/Reprimands

Reprimands (verbal negatives) are a step more aversive than the influence techniques of signal interference and reality and value appraisals. Reprimands are a verbal expression of disapproval though some definitions are broader. Reprimands may be in the form of a "chewing out" or yelling but also may be quiet. Van Houten (1980) suggests variety in the form of reprimands as most effective, but Kerr and Nelson (1983) caution that reprimands are attention from the teacher and therefore become a positive reinforcer for some students. Tanner (1978) suggests that soft reprimands as opposed to loud ones offer several advantages: the teacher provides a model of speaking softly, the reprimand has a calming effect, the teacher has to be physically close to the individual, and the teacher expends less energy than with a loud reprimand. Reprimands should describe specifically what someone has done wrong and why it is wrong (e.g., "Bill, stop throwing sand. You could put someone's eye out.").

Natural and Logical Consequences

Dreikurs (1968) denounces the use of punishment and praise (positive reinforcement) and substitutes natural/logical consequences and the process of encouragement. A natural consequence is defined as that which happens as a result of one's behavior. If a student is rushing to get into line and trips and falls, we call this a natural consequence. On the other hand, if a student is rushing and pushing others in order to be first in line and is removed by the teacher to a place at the end of the line, then this would be identified as a logical consequence. In other words, a natural consequence is an inevitable occurrence that happens by itself while a logical consequence is arranged but related directly to the preceding behavior (Wolfgang & Glickman, 1980). Encouragement emphasizes improvement rather than a perfect product, criticizes the student's actions rather than the student, keeps the student in a group with other students who are willing to help, and refrains from having the student compete against others.

Response Cost

Response cost (RC) is a behavior management technique which involves the loss of previously earned reinforcers following misbehavior. An inappropriate "response" is followed by the "cost." Points, tokens, activities, portions of free time and recess, and other privileges have been removed in many successful behavior suppression interventions. RC has been found to be a mild aversive which avoids many of the undesirable side effects of punishment (Kasdin, 1977). While RC is easily administered, it is extremely powerful. It has been found to be very effective with BD and other children in a wide variety of settings and with many different problem behaviors (Walker, 1983). RC has the added advantage of dovetailing with nearly all positive reinforcement systems. There is some risk of children gaining secondary reinforcement from teachers during the "cost" procedure so verbalizations must be minimal, and RC should be matter of fact. It is essential that students keep a positive balance of points, or there will be no reason to try to behave appropriately (Kerr & Nelson, 1983).

> Cletus, a 14-year-old in Mrs. Carson's "self-contained special class with integration" program, has a short fuse and a long middle digit which he displays occasionally for the teacher and frequently for classmates. A plan to earn Cletus free time on Friday for suppressing his finger was abandoned Monday at about 9:15. Mrs. Carson felt that Cletus' behavior was often a reflection of a strong emotion but also impulsive and habitual. She decided to try a more formal RC program to help Cletus decrease this behavior.
>
> After discussing the problem again with Cletus, Mrs. Carson awarded 10 minutes of free time at the end of each of his four classes with her. This seemed preferable to meddling with the tokens he was earning for good work (Walker, 1983). She placed a cardboard clock in Cletus' view and set the hands at 10 minutes. For each finger observed, the hands were changed to reflect the loss of 1 minute of free time. The hands were moved immediately without comment and in a neutral fashion. Cletus used his finger much less frequently but lost several minutes of time most periods for the first week. When losses continued, Mrs. Carson taught and practiced "I-statements" (Gordon, 1974) with Cletus as a more appropriate response to upset (e.g., "When you give me more worksheets before I finish, I feel angry and I'd like you to wait until I get caught up."). Cletus enjoyed the power of his new tool and used it frequently while his finger flashing dropped to nearly zero per day. After four weeks, Mrs. Carson discontinued the program but continued to praise Cletus frequently for use of "I-statements."

RC is most useful for discrete acting-out behaviors or rule violations. It is very effective with impulsive children. It has been found to be an effective supplement to reinforcement techniques which may strengthen positive behaviors while leaving residual severe inappropriate behaviors. RC appears to be more effective than reinforcement techniques with low-rate behaviors. Here a student's vigilance is under stress to resist temptation or to deal successfully with low-frequency antecedent conditions that reinforce inappropriate behavior. Overall, treatment reviews generally find RC interventions to have positive outcomes equal to positive reinforcement in suppressing behavior with the advantages described above (Walker, 1983).

Loss of privileges is an informal format using the same behavior mechanics as RC. Teachers use the contingency of the loss of a pleasant consequence for misbehavior or the contingency of making up work while missing a pleasant consequence. Teachers should inform students of the prospect of a loss and should use the approach systematically, but this is frequently not done. Suggested readings on response cost include Walker, 1983; Kasdin, 1977; and Alberto and Troutman, 1982.

Overcorrection

Overcorrection is a behavioral intervention which follows the occurrence of a misbehavior. It features educative and corrective activities as consequences. In some theoretically correct applications, the procedures may be quite aversive but never arbitrary. With severely handicapped and very young children, overcorrection frequently includes "graduated guidance." This technique is employed with "positive practice" activities and requires close physical intrusion and actual physical control by the teacher of the student. Physical control may range in steps from forced manipulation to "shadowing" depending on the degree of cooperation exhibited. Such applications require very careful planning, staff training activities, monitoring and outside supervision (Foxx, 1982). With older and higher functioning children, graduated guidance is rarely used. In these instances overcorrection takes the form of logical consequence, positive practice, and/or restitutional activities. Many very common disciplinary procedures take this format. This type of overcorrection is not highly technical and does not require such precision and intensity in usage, though analysis of the behavior problem situation and pre-planning are very important (Azrin

Besalel, 1980).

There are two basic components or principles to overcorrection. The first is that the misbehaving child restores or improves the situation to a state greatly superior to the original. The child not only corrects the wrong but "overcorrects" it. This is the principle of "restitution." In the second part of overcorrection, a child repeatedly practices an appropriate alternative or incompatible behavior to the misbehavior. This is the principle of "positive practice." Positive practice and restitution may be applied individually or in combination. Positive practice is more often chosen to deal with stereotypic behaviors, toileting and other self-help training, status or rule-violation behaviors, messes, or disarray and general skill deficiencies. Restitution activities are more often employed when objects are involved (stolen, disturbed or broken), when someone's rights have been abused (annoyed, injured, frightened or in some other way put out), following self-injurious behavior, or when a child becomes agitated (restitution is then typically in the form of required relaxation which may function as quiet or timeout with additional positive practice activities as a second stage).

Overcorrection With Graduated Guidance

When employing overcorrection with graduated guidance, a number of factors should be considered. After defining the target behavior and recording baseline rates of the behavior, careful planning and a team approach are necessary. Staff involved must all master the sequence of steps and carry them out swiftly and similarly. Personnel must be scheduled in a manner to make one teacher available to carry out the procedure for at least 30 minutes for each occurrence of the behavior. Administrator and consultant time must be provided during planning and early phases of the intervention. Teachers or others carrying out the procedure should each do so under the observation of and with feedback from a consultant several times initially and occasionally as the intervention continues. The program should be developed with the awareness and consent of parents and administrators — with active involvement if possible. If there are likely to be any strenuous physical activities, medical approval should be sought.

Julie is a mildly retarded 10-year-old child with a well-controlled seizure disorder who is placed in a classroom for children with severe behavior disorders. Among her behavior problems is handbiting which occurs when Julie is frustrated and at other times when there is no clear antecedent condition. The behavior had been chronic and calluses and mild scarring were present. Ms. Wilson and her consultant developed a DRI program reinforcing the incompatible behaviors of writing math problems and holding her pencil while completing seatwork. These activities were both approximately 30 minutes daily. Over a period of 4 weeks of treatment, average handbiting for these 60 minutes dropped from 20 to 5 daily. Records of handbiting at other times during the day were somewhat variable but averaged 5 per day and were apparently unaffected by the DRI procedures in effect during the two seatwork activities. A return to pre-intervention conditions left the rates at the more recent levels.

Ms. Wilson and her consultant conferenced with Julie's parents regarding the effects of the DRI program and the continuing concern. Parents reported handbiting also occurring with some frequency when Julie was frustrated or upset but not otherwise. All agreed to try an overcorrection program with the hopes of drastically reducing or eliminating the handbiting. A verbal cue to interrupt the behavior and the overcorrection procedure were developed and refined. These were then demonstrated for Julie, her parents, and the principal at a second conference a week later. A brief written protocol of procedures, follow-up time lines, and decision criteria was printed for everyone involved ;prior to the starting date. Because of the staff time requirement involved in carrying out the actual procedures, Ms. Wilson's consultant planned to spend the week in her classroom with the exception of a few prior commitments.

On the first occasion of handbiting on the starting date, s. Wilson said sharply, "No! Julie is biting her hand; no handbiting." The "No!" served as a conditioned aversive while the rest of the direction describes the inappropriate behavior. Ms. Wilson moved into action and put Julie quickly through the overcorrection exercise without giving Julie any eye contact, extra talk (each direction given only one time) or physical contact (except as required).

Ms. Wilson used a monotone to direct Julie to a mat where she was required to rest for 3 minutes. When Julie was slow to respond, Ms. Wilson gave her a light physical prompt to raise her from her chair and increased this until Julie began moving. Ms. Wilson shadowed her the remainder of the way and applied a flat palm to Julie's shoulder when she attempted to rise from the mat prematurely. At the end of 3 minutes, Julie was directed to go to the

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lavatory to treat her bitten hand. Verbal directions were presented clearly one time each. If Julie did not begin within 10 seconds, graduated guidance was provided. Unlike repetitive positive practice activities, this restitutional activity should require a minimal degree of manual guidance. Julie was directed to scrub her hand with soap and water and to repeat the activity with a mild disinfectant. Ms. Wilson then directed Julie to apply a lotion to her hand. She was finally directed to brush her teeth thoroughly and finally to rinse with Listerine. The restitution activity required about 10 minutes from the point when Julie's initial behavior was interrupted.

On the second occasion of handbiting, Julie bit her hand while applying the lotion. Ms. Wilson instantly said, "No! Julie is biting her hand; no handbiting." Ms. Wilson guided Julie's hand to her side and directed her to the mat to begin the cycle again. When Julie completed her mouth rinse and mouth drying appropriately, she was directed to return to her original task. She was praised and given a token 15 seconds and 2 minutes after resuming her work.

On successive days of the first week handbiting occurred 6, 4, 5, 2 and 0 times. Ms. Wilson and her aide managed the overcorrection when the consultant was absent three times, and the consultant performed the overcorrection every third time. The overcorrection processes averaged about 15 minutes each. Both the teacher and aide admitted that the plan was harder on them than on Julie and had second thoughts until Thursday when only two handbitings occurred. During the second week, handbiting occurred 0, 2, 0, 0 and 0 times. After several more weeks with only rare handbiting, Ms. Wilson and her consultant altered the overcorrection plan so that on the first instance of handbiting on a given day, only the verbal warning was given. Further handbiting on that day required the use of the overcorrection procedure.

Use of overcorrection where graduated guidance and positive practice are employed is a very complex procedure—much more complex than the above example begins to describe. Physical demands on staff and students can be extensive. There is a slight chance that it will be overused, but there are risks that the procedure may become strongly aversive or painful. The staff time requirements of the positive practice procedures (10 or 15 minutes) demand extra personnel commitments, especially for use with high-rate behaviors. Students may become combative during positive practice, and use with large, strong students is not recommended. Descriptions of staff training and further examples of overcorrection with positive practice and graduated guidance are beyond our resources, but the reader is directed to Foxx (1978), Foxx and Azrin (1973a, 1973b) and Judkins (1976) On-going consultation from an experienced clinician is extremely important in all such applications, not just initial efforts.

Overcorrection Without Graduated Guidance

Overcorrection procedures have been widely used with mildly handicapped BD children as well as with the move severely handicapped. The aspects of graduated guidance are minimized by planning with the student and by a choice of restitution and positive practice activities that are logical and only mildly aversive. Overcorrection using strongly aversive, artificial, or arbitrary positive practice routines are much more likely to elicit hostile responses, but sensible restitutions and practice exercises are more acceptable to students who acknowledge a problem in their behavior.

Example 1: Mr. Perez has had a hard time getting Bill to do his spelling sentences. Handwriting and difficulty level did not seem to be a problem based on his other work. The teacher tried awarding Bill extra points for spelling work completion but with no noticeable effect. When kept in at recess, Bill dawdled through about half the work; the other half was completed in 15 minutes after school. While this was not intolerable, Mr. Perez felt that Bill was capable of better. After observing and talking to Bill about the problem, Mr. Perez determined that distaste and wandering attention seemed likely to be the big culprits. Mr. Perez decided to employ the restitutional activity of recopying the spelling sentences a second time when Bill had not finished before recess.

Example 2: Dotty mistakenly "borrowed" and used another child's art paper from the other child's mailbox in the classroom. Ms. Robbins decided that simple correction, giving the other student Dotty's paper, was sufficient. When Dotty took another student's drawing book (one that was in better condition than Dotty's) a couple days later, Ms. Robbins did not believe Dotty's protests that it was an accident. Dotty had to return the drawing book, provide extra pages that she used, and loan the student her brand new box of crayons for art class the next day.

Example 3: Mr. Fran has four classroom rules to help him run an efficient class. Terry, Dale and Lisa have chronic problems "forgetting" and violating those rules. Mr. Fran thinks that some

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positive practice activities are in order. He invites Terry, Dale and Lisa to some extra practice sessions during recess time. He reads the rules to the students, and they take turns in retelling them to Mr. Frank for 15 minutes. This continues on a second and third day, by which time the children assure Mr. Fran that their memories are improving. Mr. Fran notes that their rule following in class has improved, but he is prepared to provide some extra practice again if "forgetting" recurs.

Overcorrection is supposed to be unpleasant and should never be allowed to become reinforcing. Adult attention and the potential secondary gains are to be minimized. Students are moved quickly into overcorrection after interrupting the inappropriate behavior. This is particularly important when children are upset or when using the more complex positive practice procedures. Problems with upset or temper loss often involve some relaxation before heading briskly into the positive practice or restitution activity. Those procedures should be somewhat strenuous and related to overcorrecting the misbehavior involved.

When overcorrection does not involve rigid positive practice activities with graduated guidance, as in the latter examples, emphasis is placed on identifying meaningful and corrective actions. Children who have misbehaved must be exposed to some means of improving the situation beyond the initial expectations or to a condition superior to the original. When children are not capable of restoring a situation, partial contributions should be considered: small children should be required to gather materials and help in reconstructions and clean-ups, alternative restitutions to people can be arranged, a percentage of costs can be restored, or some personal possession may be traded or loaned to the person suffering a loss.

Advantages and Disadvantages

Overcorrection is an effective technique when problem behaviors are severe, very disruptive, frequent and/or intentional. It works specifically to counter the misbehavior and involves practicing an appropriate behavior. Children expend a greater effort or pay a greater cost than would for an appropriate alternative behavior. This involves a net loss on the part of the misbehaver. Reinforcement from the environment is also lost during the period of the overcorrection process. When graduated guidance is employed, the child is hurried through the steps by a very intrusive and demanding adult. This adds an aversive quality and must be monitored closely. For children with more social awareness, overcorrection allows them to make restitution in a larger sense by working off their mistakes. Doing this may bring about some increased sensibilities of social responsibility and moral consonance.

Overcorrection programs with graduated guidance have many disadvantages. Developing and operating them involve great expenditures in effort and time. There are many limitations on the type of student and sort of problem with which they may be used. Review earlier discussions and Foxx (1982) for a summary of potential liabilities. Azrin and Besalel (1980) report that refusals to perform overcorrection are not uncommon. They suggest four rules to follow in such cases: (a) arrange more severe consequences for refusal, (b) discuss and plan with students and parents before beginning, (c) use self-correction as a main component, and (d) give directions while in close proximity and employ some manual graduated guidance with very young children. Information about maintenance and generalization of treatment gains is limited. One study (Simpson & Swenson, 1980) noted some modest decrease in some non-targeted, other self-stimulation behaviors of two autistic children, but there were no improvements in the frequency of some correlated or incompatible adaptive behaviors that were monitored.

Related Approaches

Two behavior techniques are often confused with overcorrection: negative practice and satiation. Negative practice forces children to repeatedly perform the inappropriate behavior with the philosophy that the activity will become so aversive that children will choose not to repeat it. Aversion is said to arise through either response fatigue or stimulus satiation. Most students have had very modest success in dealing with behaviors such as smoking, mouthing objects, self-stimulation, tics and stuttering. Having students practice inappropriate behavior raises ethical questions, and students often become oppositional or upset during practice. There is no good evidence of the effectiveness of this technique in classroom settings, and the technique is not recommended.

Satiation techniques allow children to continue with an inappropriate activity at their own initiation until they are no longer motivated by antecedent conditions or environmental reinforcers. The technique is often heightened by presenting extra or even unlimited amounts of the reinforcer. Food stealing, eating behaviors, hoarding, and self-stimulatory activities are among the most frequently treated with satiation. The procedure rarely eliminates the target behavior; however, it is not expensive in teacher time and

can lead to reduced rates in some cases. The process is also non-aversive by definition. Any behavior which has potential for harm or disruption to the child or others is not appropriate for this approach.

Other Aversive Consequences

Within a general discussion of aversive interventions, there is a wide variety of consequences which have not been mentioned though they are often employed in schools. The techniques under this heading are not easily grouped, but all involve some expenditure of effort, loss of stimulation, or discomfort separate from any logical restitution or positive practice activity. All have been used in BD classrooms, but their use is controversial in some cases and their efficacies not consistently demonstrated.

Contingent Effort

Contingent effort (CE) is assigned following a target behavior. In some cases, CE may be an assigned physical exercise that follows a misbehavior. It may be similar to an overcorrection positive practice activity, but a CE is generally chosen for the amount or aversiveness of the effort rather than for the logical or educative aspects. The arbitrary nature of the tasks may incite hostile responses, and all of the disadvantages of overcorrection with positive practice continue. CE does not involve graduated guidance and may serve as an alternative to overcorrection if no logical positive practice or restitution can be identified. CE tasks should be chosen for low profile and simplicity to avoid secondary gains from peer attention or other sources. The tasks should be fairly routine and acceptable so that refusals are minimal. They should require significant effort without undue physical strain and have a brief duration. Luce and Christian (1981) suggest less than 20 seconds for severely handicapped students. Examples: the gym teacher has Bill run two extra laps for talking in line, Joey was required to stand up and sit down five times whenever he began to whine or cry with no apparent antecedent, Ms. Ling directed Flo to clean out her desk and backpack when she teased Julie (apologies had not worked, restitutions to Julie created additional problems, and Ms. Ling may have a hidden agenda regarding Flo's orderliness). Though some of the examples may be simple and attractive, additional consideration may have identified more logical consequences or an overcorrection approach. The effectiveness of CE has been heightened by combining it with a DRO procedure.

Response Requirement

Unlike CE, response requirement (RR) is planned to precede the target behavior. It also requires student effort to decrease an inappropriate behavior. RR tasks are assigned so that a child is permitted to respond with a target behavior following the completion of the RR. The required extra effort is designed to discourage the emission of a reinforcing behavior. While teachers cannot enforce RR for many impulsive behaviors, it has been used in slowing food intake by requiring a sequence of activities prior to each bite, reducing self-stimulation and other bizarre behavior in specific settings, reducing caloric intake by having the child write down each food and record calories, reducing smoking, and reducing frequent teacher distractions by requiring the student to write down questions before presenting them. Many RR activities have been artificial while others have been educative and/or logical. RR requires some degree of cooperation from the student and has shown potential for use in self-management routines. It is most appropriate when reduction rather than elimination of a target behavior is sought.

Sensory Extinction

Sensory extinction (SE) is a behavioral approach which systematically identifies the salient sensory modality or sensory source that maintains a certain class of target behaviors. This recently developed method has been used almost exclusively with autistic, mentally disabled, and psychotic children. Target behaviors have included echolalia, self-stimulation, rituals, compulsive behavior, fetishes, bizarre motor behaviors, and some forms of self-injury (cf. Koegel, Rincover, & Egel, 1982).

Applications of SE have developed in two directions. First, objects which appeared to be reinforcing a maladaptive behavior have been adapted in ways that alter the sensory stimulation produced. For a child spinning a plate on a table, the table was covered with carpeting then eyes were blindfolded (Rincover, 1978). For this child, eliminating the auditory stimulation led to an abrupt decrease in plate spinning. For flipping a light switch, one child decreased the behavior only when the light was disconnected, while another child reduced his behavior only when the clicking sound was eliminated (Rincover, Newsom, & Carr, 1979). Maag, Wolchik, Rutherford, and Parks (1986) found that SE techniques decreased topographically similar inappropriate behaviors in addition to the target behaviors. This may give the

user some hope of generalizability of effects to other behaviors and economy in treatment.

The second area of study with SE has been in developing alternative and more appropriate sources of sensory stimulation. Rincover and his colleagues (1979) taught children to play with a variety of toys which each emitted sensory stimulation primarily in one modality. Children showed individual patterns or sensory preferences by choosing certain toys for extensive play while ignoring others. When preferred toys were present, little self-stimulation occurred; when only non-preferred toys were present, self-stimulation rose markedly. The results demonstrated how more appropriate materials and activities might be substituted for inappropriate materials with dramatic reductions of target behavior rates and with increases in appropriate behaviors.

SE is simple to operate unless there are complex mechanical accommodations; these should be avoided. SE is not generally aversive, though it does eliminate some reinforcers from children's environments. Uses have been recent and limited in range. Some visual screening techniques and the use of materials to reduce hearing sensitivity would not be recommended as on-going treatment, but might be used to identify preferred sensory modalities. This information could be used in developing alternative sensory stimulation reinforcers and more appropriate behavior. Some of the behaviors targeted in past SE applications have not been harmful or disruptive. Good judgment of the need for intervening and of the economy of staff effort is called for prior to developing elaborate SE plans.

Punishment Writing

Copying sentences, pages from the dictionary or other material is a traditional punishment activity employed by teachers. Sentences generally consist of some promise not to misbehave in such a manner again. Punishment writing (PW) is a form of contingent effort. It often becomes a mindless mechanical activity where students copy letters or words vertically down the page. Copying horizontally may be as mindless, but guarantees that the child will go more slowly, thereby increasing the aversiveness. Though PW is less aversive than many other punishment forms, it has no established efficacy. Separate studies have found no change in rates of misbehavior after copying material on steam engines (Blackwood, 1970) and an increase in misbehavior following a brief initial decrease when students copied sentences (Blackwood, 19710. Allowing that PW may decrease misbehavior in some students and might heighten the aversiveness of timeout when the teacher cannot guarantee the alternatives including the related technique called the mediation essay. This approach will be described later in this chapter.

Conditioned Aversive Stimulus (CAS)

A CAS is a neutral stimulus which has become aversive by being repeatedly associated with aversive or punishing stimuli. The word "No!" quickly becomes a CAS when associated with a swat to the bottom, a timeout in the bedroom, or worry about abandonment, pain, or danger. The word "No!" and the follow-up description of an inappropriate behavior are purposely used as the first step in many overcorrection plans. These words function as a CAS to interrupt an inappropriate behavior prior to beginning the restitution or positive practice. Verbal negatives, reminders of consequences or a walk to the principal's office might all take on CAS characteristics. CASs of this variety may be effective if employed rarely and in combination with positive reinforcement in a warm, accepting environment. Many simple CASs can bring about an abrupt interruption or decrease in the rate of a misbehavior. Pitfalls include: loss of effectiveness with frequent use, paradoxical effects with some youngsters (who might enjoy seeing an adult holler or enjoy the secondary peer status derived), the need to increase the intensity of CASs if they are used extensively, the tendency for a milder CAS to be ineffective when children have experienced a more intense CAS, fearful/withdrawn/escape/ avoidance responses by some children, and aggressive or oppositional responses by some children.

Compliance Training

A means of decreasing inappropriate behavior, violations of rules, and resistance to directions is compliance training (CT). It is a formal instructional activity programmed to gain prompt response to increasingly demanding and complex verbal directions from the teacher. The CT model, developed by Engelmann and Colvin (1983), is fairly complex. It describes a sophisticated hierarchy of training activities with comprehensive response failure procedures. This material carefully describes the development and management of such programs for use with BD and other special class children who misbehave. The program includes sharp verbal negatives, physical manipulation of children in varying degrees, and various reinforcement strategies. A great deal of caution is suggested in working with such a program as hostile

responses, some physical risks to a child and teacher, and other negative side-effects are possible. The program is clearly limited in the type of students and problems with which it can be employed. A school program using CT should be reserved for severely behavior disordered children and should involve parents, administrator and support team members from conception throughout use. On-going monitoring is essential. While others (e.g., Kerr & Nelson, 1983) describe more simple and informal versions of CT with wider uses, we believe that all CT programs have significant risks and limitations. We direct the reader to the section on punishment disadvantages and guidelines in this chapter and to careful study of Engelmann and Colvin (1983) prior to developing a CT program.

Corporal Punishment

Corporal punishment (CP) is a strongly aversive physical action which results in pain. It has been traditionally applied in some schools to both regular and special education students following certain misbehaviors. It has been delivered as a hot, spontaneous slap or swat from frustrated teachers, as a "last resort" when "talking doesn't do any good" or "nothing else worked" by parents and principals, and in more consistent manners when prescribed by administrative policy or in an IEP of some BD students.

CP waxes and wanes in public favor and is accepted or rejected based on various religious or moral values more than documented value or utility. There is overwhelming evidence that punishment can reduce many inappropriate behaviors when applied consistently (Rutherford, 1978), but the effects of CP in school settings has not been systematically studied. Anecdotal reports of the use of CP are numerous, but descriptions of effects range from amazing successes to abject failures. If there is some consensual evidence of efficacy, it has escaped the authors. CP can be used to interrupt misbehavior, and, undoubtedly, it is followed by reduced rates of misbehavior in some cases. A serious concern is that we do not know when or with whom it might be effective. CP is susceptible to all of the limitations of other punishments, often do an even greater degree. Some additional disadvantages and limitations include: risk of physical injury to the child and adult, violation of individual rights and in some cases legal statutes, modeling physically aggressive responses, potential for increases in aggression by the child, greater emotional upset following CP, and setting specific behavior changes. Teachers and administrators using CP often suffer emotional upset themselves. Given these limitations, disadvantages and risks, we cannot support the use of CP in BD classrooms or with BD students in general. Even in the most extreme and violent crisis situations, we would counsel the use of non-escalatory approaches, crisis intervention models, and physical restraint (as the last resort). A crisis model will be described in the chapter on self-control in this manual.

Pain

Other physically aversive interventions are mentioned in this chapter under the headings of positive practice overcorrections, negative practice and in other areas. Pain is not an intentional outcome of any of these procedures with the exception of corporal punishment and classical aversive conditioning which will be mentioned briefly below. At any point where pain occurs or is suspected, the intervention procedures should be discontinued or altered. Physical restraint is discussed at another point in this chapter; pain is not the intention of physical restraint and should be avoided.

Contingent electric shock and other pain provoking stimuli have been occasionally used in classical aversive conditioning as therapy with severely behavior disordered and autistic children. Legal and ethical issues are great, negative side-effects are a concern, and evidence generally suggests temporary suppression of symptom behaviors with regression when these aversives are discontinued. We acknowledge the potential for such interventions under close medical and clinical supervision with youngsters whose lives or health may be at great risk. We see no acceptable use for such interventions in BD classrooms.

Physical Restraint

Foxx (1982) describes restraint as manual or mechanical, and he separates it into behavioral and custodial types. Custodial restraint is seldom used therapeutically in schools and is not applied contingently following an inappropriate behavior. It is sometimes required to protect a child from self-injury or injuring others. At times children in a BD classroom may become very aggressive and out of control. At times such behavior necessitates holding a student until help arrives to remove the student to another area or holding the student until the student calms down.

> Jerry was a seriously disturbed child who was extremely active, aggressive, and out of control on his school bus. Earlier management attempts proved futile, and Jerry's behavior was clearly

dangerous to himself and everyone else. The principal, teacher, parents and support team discussed the problem and decided that a restraint jacket would be the safest and most efficient way to get Jerry to school. His parents signed a permission slip to use the device (required by the district) and the procedure was written into his IEP.

In other cases, a manual custodial restraint may be necessary in a crisis situation. Often employed during tantrums or self-abuse, it is designed to help the student calm down without unnecessary reinforcement. Some educators suggest talking quietly to a child in these circumstances (e.g., Long & Newman, 1980), while others strongly object. They feel that talking may reinforce the upset, and they avoid holding the child unless absolutely necessary (e.g., Nelson & Rutherford, 1983). Research on use of this type of restraint is very limited, and there are serious risks: the teacher may be unable to control the child endangering both (it should not be attempted unless the adult is clearly larger and stronger than the child), the actual physical contact may be very reinforcing to the child or may model reinforcement for class members, use of the procedure may lead the student to strike out or misbehave more frequently, and the procedure may become punitive. Schloss and Smith (1987) state that there are only two justifiable reasons for using manual restraint in public schools: prevention of harm to the student or others and less aversive techniques have been exhausted despite conscientious application. Our reader is referred to Smith (1980) and Schloss and Smith (1987) for careful study of guidelines and procedures prior to planning the use of restraint.

Behavioral physical restraint is pre-planned and applied following specific misbehaviors. It is employed as a punishment designed to weaken target behaviors. Behavioral restraint has come under fire for excessive use which leads to all of the failings described above and to a greater degree. Extremely prolonged use of restraints might cause either isometric strengthening of some muscle groups or muscle deterioration from lack of non-normal use of certain groups. It is effective in suppressing behavior while the restraints are in force and may lead to long-term suppression. The courts have found that restraints cannot be used as punishment or as a substitute for a therapeutic treatment program. Such treatments have been allowed only in instances of serious self-abuse or risk to others—and after other less punitive treatments have failed. In addition to parents, support staff, and the school administrator, such treatments should be cleared through human rights or procedural committees and mental health professionals (Foxx, 1982).

Punishment in BD Classrooms

In summarizing his review of the use of aversives with BD children, Rutherford (1978) concluded that most hard evidence supports the effectiveness of punishment procedures in decreasing inappropriate behaviors. He goes on to say that much resistance to the use of aversives rests on value judgments and moral arguments rather than on any accumulated evidence of harm. Additionally, punishment appears to be a more immediate and effective producer of behavior suppression than positive alternatives in many situations.

Rutherford and Neel (1978) list four occasions when the use of punishment is appropriate: (a) when DRO or extinction procedures are not possible, (b) when inappropriate behaviors are extremely reinforcing (to the degree more positive reinforcers cannot be identified), (c) when the behaviors are potentially harmful to the child or others, and (d) when the behaviors are so extreme that they decrease the likelihood of positive interaction with caregivers.

Advantages

The advantages of punishment when correctly and effectively applied include: immediate suppression of behavior; long-lasting effects in some cases; complete and permanent suppression in some cases; influence on peers not to misbehave as they observe punishment of another; denial of unplanned reinforcement of inappropriate behavior; effects on even very resistant behaviors; teachers' gain of immediate control; powerful effects of fairly mild aversives (soft reprimands, point loss, etc.); ease of administration in many procedures; and requirement for generally less teacher time than for many reinforcement or training inventories.

Disadvantages

The possible disadvantages of correctly applied punishment include: loss of personal reinforcement value by teachers who use punishment frequently; fearful or anxious responses; children's development of tolerance to frequent punishment; suppression of behavior in many situations when only one is intended; emotional upsets or aggressive responses; unpredictable side effects; paradoxical reinforcing effects in

some children; flight or escape responses; negative behavior in the peer group; children learning how not to act instead of how to act; and negative responses to children as modeled by teachers.

The potential risks of poorly applied punishment include: risk of injury to body, self-esteem and social status; strong emotional or aggressive responses; social withdrawal; destruction of relationship between student and teacher; decrease in children's ability to trust adults; severe guilt and long-term emotional responses; and teacher and staff incurring moral, professional and legal liabilities.

Guidelines for the Use of Punishment

Listed below are guidelines for the appropriate use of a punishment intervention. The guidelines are more elaborate than many simple plans may require. Some guides will not be relevant with all types of interventions though review of these points is suggested in any case. All management plans involving overcorrection with graduated guidance, physical removal from class, repetitive physical activity, negative reinforcement, exclusionary timeout, physical restraint, and strongly aversive procedures should be examined by these guides.

1. Punish only in situations that demand it (e.g., Rutherford & Neel, 1978, circumstances noted above).
2. Punishment should be balanced by reinforcing opposites or incompatible behaviors.
3. Punishment must have the appropriate intensity (too mild, no effect; too harsh, increased risk of side-effects).
4. Milder forms of punishment can be effective in very positive climates.
5. Punishments are chosen to suit the offense.
6. Punishments are chosen to suit the child by age, maturity, physical condition, behavior history, etc.
7. Involve parents and consultant early if considering punishment and look for other alternatives.
8. Develop the intervention plan through a team approach.
9. Share behavior concern and discuss the planned intervention with the student.
10. Write the program and evaluation into the IEP.
11. Dry run or pilot trial of the punishment routine under observation and with feedback.
12. Eliminate any risks of possible physical, emotional, and social problems.
13. Carry out immediately following the inappropriate behavior.
14. Carry out each time the behavior appears (no bargaining, no breaks and warnings only as described in the program).
15. Carry out in a neutral tone without anger or malice.
16. Record frequency of target behavior and punishment uses; then compare with decision and time lines.
17. Monitor for drifting in the procedures that increase risks or decrease effectiveness.
18. Plan fading, or move to positive contingencies with self-control procedures.

The planning and use of punishment with autistic and retarded children with severe behavior disorders warrant some special considerations. The reader is directed to Simpson and Regan (1986) for a review.

Overkill

The reader is cautioned against investing too much time and intensity into interventions to decrease behaviors. Choose behaviors that are significant problems for the group and the individual. Recognize that many misbehaviors are setting specific and reinforced within an environment. View the behavior problems in the long view with regard to long term prognosis and general developmental factors. More than lip service is necessary in our attention to teacher, peer group and setting factors influencing a misbehavior. Look again for positives, a key influential person with a child, and a hook to entice a youngster into greater commitments to improve behavior. Individualize—not all children in BD classes need or are best served by the same plan. If a system is lockstep, then it is most often wrong. Changes in behavior may come slowly; don't trust overnight recoveries. If something is not working well, then fine tune or look for problems. If something is still not working, we should not double and redouble our intensity or the aversiveness of the consequences we are using but look for an alternate approach. Some behavior problems will persist despite heroic and brilliant intervention efforts; then we should look again to other therapies and other agencies for support. Persistent, intrusive, intensive failing efforts risk creating more devastating long term problems than some of the behaviors we may target. In some cases, status quo may be the optimal expectancy, and we must decide how best to help children and parents to survive intact.

TIMEOUT

Timeout removes a student from reinforcement. Sometimes a student can remain in the classroom but be limited from the reinforcement of that setting. Children may be moved to a separate area of the room or the playground where they can watch but not participate in reinforcing activities; this is called "contingent observation." This is a non-exclusionary timeout as is the "timeout ribbon" approach where reinforcing stimuli are removed and the child is ignored while in timeout status. When the student rejoins the group from non-exclusionary timeouts, that student will be quickly reinforced and will continue on task. Exclusion is another timeout format which may be reserved for more serious behaviors in a staged timeout format. Exclusion may take place outside the classroom or current activity area by having the child go to a timeout bench away from play, into the hall, or to the school office. The step beyond exclusion is seclusion or isolation. This requires that the child be totally removed from the reinforcing environment for a predetermined time. The timeout area is usually a special room stripped of reinforcing stimuli and creature comforts though a chair and table are sometimes present. This is most appropriate for older children and encourages more dignity than the floor. In the most extreme conditions, shortened days or systematic exclusion principles may be employed.

Various forms of timeout for a wide range of behavior problems are regularly employed in many BD classes (Zabel, 1986). The remainder of this section will describe a hierarchy from least-to-most restrictive forms of timeout. Examples are provided which describe facile applications and good outcomes though things seldom work so efficiently in real BD classrooms. Nonetheless, timeout is widely used and sometimes very effectively.

Timeout Ribbon

Timeout ribbon (Foxx & Shapiro, 1978) is a non-exclusionary timeout that is similar to contingent observation, area, and "looking on" timeouts. It can be used with one student or an entire class. Ribbons (also wristbands, buttons, hats, desk ornaments or any other easily removable item with some innate attractiveness) are presented to and kept or worn by students when they are working and behaving well. Students receive positive reinforcement and social praise when they are wearing their ribbons. The ribbons take on positive reinforcing value in themselves. When students misbehave in proscribed ways, students have to turn in their ribbon for a set time interval and until they are working and behaving appropriately. The temporary loss of the ribbon has a mildly aversive effect, and while the ribbon is gone students are in a state of timeout from reinforcement while still in class.

> Mr. Harris was generally pleased with the effect of his BD class management system that featured frequent social and token reinforcement and exclusionary timeout in a small room off the hall. Four or five students, however, continued to require frequent trips to timeout. Jane was a socially withdrawn child who had frequent temper upsets; she didn't seem to mind timeout at all. Ricky did well most of the time but would become upset when removed from class. Bob was not much interested in Mr. Harris' reinforcement system nor upset by trips to the timeout room, but he got along well with Mr. Harris and wanted to please him. Robert was the class goat. He had a hot temper, and it tended to get hotter when classmates teased him as he was being sent to timeout.
>
> Mr. Harris considered using the timeout ribbon as a step before exclusionary timeout with the four students described above who represented nearly all of the timeout room usage in his class. He chose instead to use the plan with all class members and to give everyone "Good Worker" buttons with the name of the student on the individual button. The frequency of Jane's temper upsets continued at about the same rate, but she quieted down quickly after turning in her button so that Mr. Harris was not forced to remove her to the timeout room. Having timeout status within the class cut the amount of time she had been engaged in odd behavior when she was previously in timeout, and on other occasions Mr. Harris was able to interrupt this behavior with an unobtrusive physical prompt. Ricky continued to meet timeout from reinforcement, but he seldom went beyond the timeout ribbon level. His overall behavior and the classroom atmosphere were much more appropriate without the frequent upsets associated with getting him to leave the room. Mr. Harris' occasions to remove Bob's timeout ribbon (button) dwindled. Bob seldom exceeded the limits which would make further discipline necessary and seemed interested in working his way back into Mr. Harris' good graces. Robert's loss of his button was less frequent than past trips to the timeout room. Peers were clearly more supportive

of him and ignored him when he was misbehaving after several of them lost their timeout ribbon buttons a time or two. While button loss timeouts continued to be at significant levels for two of the four original students, Mr. Harris was pleased with the substitution of an in-room timeout for an exclusionary timeout. For two students the timeout ribbon approach appeared to be more effective than the traditional timeout.

Timeout ribbon has been used in elementary special education classes but reports of uses with older and brighter students are rare. Salend and Gordon (1987) report on its successful use as a group-oriented timeout with a small group of elementary school-aged LD and BD resource room children. It is subject to most of the same disadvantages as other non-exclusionary timeouts (e.g., some students become oppositional when the ribbon is removed, continue to disrupt the class, become destructive, and gain secondary reinforcement from the peer group or a power struggle with the teacher). A classroom that is generally attractive and positive, has a management system featuring positive reinforcement that students observe but lose while in the timeout status, uses the timeout ribbon in conjunction with other punishments/exclusions, and has a supportive peer group can have a beneficial effect on the efficiency of the timeout ribbon program. Used in this way, it can reduce inappropriate behavior while keeping a child in class to benefit from instruction and more appropriate peer models. Timeout ribbon also allows the teacher to minimize any bizarre behaviors, self-stimulations, or positive reinforcement opportunities that may be associated with some exclusionary timeout systems.

Contingent Observation

Contingent observation (Albert & Troutman, 1982) is a non-exclusionary timeout which removes students to the edge of an activity so that they can see what they are missing and watch other students being reinforced. The student watches but does not interact; positive modeling occurs; children can still watch educational activities; and the procedures require minimal teacher time, little supervision and no special facilities.

Jackie frequently interrupted her social skills group with sarcastic comments and putdowns. The BD teacher and counselor tried to keep the meetings lively, and they used tokens towards sodas in the lounge during free time for cooperative behavior and helpful contributions. They discussed disruptions with the group at the beginning of the session one day, and the adults told the group of a new contingent observation plan. It would be referred to as "benching," and it would be used when a member was hurting group or individual progress. Several rules were outlined for extra definition. Jackie was not named but was clearly the target of this plan.

Within the first three minutes of the session, Jackie had already received her prescribed warning. Several minutes later, she was immediately benched for making fun of Rich who had volunteered to play a female teacher in a role play. The counselor moved to Jackie's side and quietly noted the behavior and consequence. Jackie resisted for a moment. When the counselor stepped between Jackie and her view of the group, she groaned. While the BD teacher was continuing with the role play, Jackie rose and shuffled off to the bench. During this timeout, group members were frequently given tokens for good behavior and when they made special contributions. After five minutes the counselor went to Jackie and reminded her of ways she could help the group and encouraged her to return to the circle so that she could participate in the next activity if she chose.

Contingent observation can work very well, but is also has some liabilities. It may be hard to keep classmates from getting "bootleg" reinforcement to the misbehaver (Foxx, 1982). Withdrawn students or youngsters prone to self-stimulation or daydreaming may find this timeout reinforcing. Students may continue to disrupt the setting which may require the use of an exclusionary or seclusionary timeout and other backup procedures. The technique works well when the activity is attractive and the child can see classmates enjoying it. Most contingent observation studies have been completed with younger children (Nelson & Rutherford, 1983), but the method is useful with older students also.

Removing a Specific Reinforcer

This non-exclusionary timeout is very effective when an extremely attractive reinforcer is available to the student (Foxx, 1982). Removal of a lunch tray for a minute or two, putting a toy up, closing the computer center, shutting off a reinforcement timer, and other applications are possible. It is a good technique to use with withdrawn students and self-stimulators because they remain in the setting and the reinforcers for their inappropriate behavior may be removed. Removal of a reinforcer is easy to complete,

but increased agitation or disruptions may ensue. Some students may become combative. The technique is possible only when a highly prized reinforcer that can be easily removed is present.

Exclusionary Timeout

Exclusionary timeouts remove a misbehaving child from the reinforcing activity area or classroom. Halls, screens and partitions, and principal's offices have served as timeout sites for upset or misbehaving youngsters. Similar arrangements might be necessary if timeout is required and no adequate timeout facility exists. Though it is quickly administered, exclusion has very clear disadvantages: many sources of reinforcement may be available during exclusion, disruptions of class routine can continue, students may have too much freedom to run or disrupt other areas, and the student may not always be supervised. Exclusionary timeout might be effective with children who are docile, tractable or under verbal control, and when timeouts are brief (Foxx, 1982). Antiseptic bouncing, discussed earlier, can be of this format (e.g., a student who has been struck by uncontrolled laughter may be sent to the hall briefly).

Delayed Timeout

Teachers occasionally employ delayed timeouts when immediate timeouts may be impractical (e.g., no supervision possible) or too disruptive (e.g., child escalates for possible secondary attention gains). Because of the many fallacies of this approach, alternative management procedures should be attempted. Delayed timeout was used successfully along with a clock light (which give immediate feedback regarding misbehavior and a gradually increasing consequence by Ramp, Ulrich and Dulaney (1971). Despite this, the timeliness of timeouts is extremely important and one of the most common problems in the effective use of timeout.

Cooling-Off

Cooling-off is a crisis intervention timeout used after inappropriate behavior or during an upset of emotion (Grayson, Kiraly & McKinnon, 1979). These procedures involve various counseling, emotional support, and problem-solving techniques while children are in seclusion or immediately following seclusion. Arguments in favor of this approach bear the most weight in situations where there is an extreme upset, where timeout is self-imposed, and/or where the seclusion is serving a positive function (e.g., as a calm, non-stressful environment).

Seclusionary Timeout (Isolation)

Seclusionary timeout is synonymous with the timeout room and is used to isolate a student following a predefined, inappropriate behavior. This form of timeout has been frequently used with BD children and in other special education settings (Gast & Nelson, 1977; Rutherford, 1978; Brantner & Doherty, 1983; Harris, 1985).

Prior to initiating a timeout program for a student a number of preconditions are suggested. Positive behavior management efforts and milder forms of punishment should be used and their effects documented. A secure timeout room is a necessary prerequisite to consideration of seclusion or isolation. Gast and Nelson (1977) suggest the timeout room:

a. Be at least six feet square in size.
b. Be properly lighted (preferably recessed, with the switch outside the room).
c. Be properly ventilated.
d. Be free of objects and fixtures with which children could harm themselves.
e. Provide the means by which an adult could continuously monitor, visually and auditorily, the student's behavior.
f. Not be locked. A latch on the door should be used only as needed, and only with careful monitoring. (p. 463)

The BD teacher should plan a conference with parents, principal, child (when appropriate) and support personnel who may be involved. If parents and professionals are in agreement on the use of seclusion, permission slips should be signed and an IEP written.

The standard procedure for the administration of a seclusion timeout has a number of variables. Warnings are given or not given without clear evidence of superiority or effectiveness. Harris (1985) suggests the use of one warning with children when they respond well to it. When a timeout situation arises, explanations of the misbehavior to the student are generally discouraged because of possible reinforcement of the inappropriate behavior. The use of brief descriptions may be ethically superior when students show they

can tolerate them well. The teacher should give a clear direction for the child to go to timeout (without assistance). Proximity to the student and a quiet monotone are the preferred delivery. If the student is reluctant to go to timeout, the teacher should begin physically removing the child within 10 to 15 seconds. For small children who are seated, teachers may choose to take their hands and lead them. For larger youngsters, proximity and a firm gentle hand can be the first step. Should resistance continue, teachers (and helpers if necessary) remove the child briskly while controlling the child carefully so that any risk of injury is minimal.

When there is risk that the child may break away or become dangerous to staff or self, alternative procedures or different interventions are required. Penalties to make resistance less likely, extra staff support, prior removal of the peer group when there is risk of extreme upset, and required restitution of damages and for injuries inflicted are possible contingencies. Response cost or DRO procedures are alternative approaches that can be substituted in some cases.

Harris (1985) reports that timeouts from a few seconds to several hours have been used employed in school studies. Timeouts of short durations (e.g., 2 to 5 minutes) are effective with a wide variety of students (Brantner & Doherty, 1983). Zabel (1986) cites 1 minute in timeout for each year of a child's age. Longer timeouts decrease the value of shorter timeouts, are hard to watch carefully, may elicit personal hostility toward the teacher, decrease learning time, allow students to adapt or to forget why they are in timeout, give opportunities for self-stimulation and other inappropriate behavior, and have been found ethically and legally questionable (Gast & Nelson, 1977; Foxx, 1982). Gast and Nelson (1977) suggest that the value of withholding reinforcement associated with isolation does not exceed 15 minutes. Timeouts of longer duration may be suspected of using seclusion for reasons other than therapeutic treatment or shaping behavior. Foxx (1982) calls for a maximum of 30 minutes isolation including extensions for continuing misbehavior in the timeout room. Rutherford and Nelson (1982) state that in institutional settings, seclusion beyond 1 hour is not permitted unless there is no other less restrictive means of controlling behavior.

Four children in Mrs. Robb's BD class had IEPs for the use of isolation in the timeout room. Though the timeout room might be used for any of Mrs. Robb's children during a crisis involving an extreme upset, isolation was used with the four children after each occurrence of specific behavior problems.

Lance was a hostile and aggressive sixth grader who had an IEP for standard use of isolation for aggression, loud temper tantrums, and destruction of property. When Lance tripped Paul, Mrs. Robb immediately moved to Lance's side and said, "Lance, go to timeout for 5 minutes." Lance responded, "I didn't do anything; he just tripped over something." Mrs. Robb stepped closer but did not speak. After 10 seconds, she put her hand on Lance's elbow and applied brief pressure to move him up. Lance swung his elbow to rid himself of the hand, but Mrs. Robb did not retreat. Lance turned in his chair to face Mrs. Robb who said nothing but looked from Lance's eyes to the door indicating that he was to leave. Lance noticed that the aide, Mrs. Hinckly, was now about five feet behind him, and he made eye contact with her. Mrs. Hinckly had moved to this spot as Mrs. Robb approached Lance. Though Lance had not struck out at adults during previous timeouts, he had physically resisted until they were able to get him from his chair to his feet. This time Lance rose from his desk and walked to the door with Mrs. Hinckly about one arm length behind and to the side. He pushed Jill's math book to the floor as he passed her but continued out the door and on to the timeout room. Mrs. Hinckly closed the door behind Lance but did not lock it. She looked through the glass window into the room after 30 seconds and about once every 2 minutes thereafter. Lance yelled and sang loudly while in timeout but Mrs. Hinckly merely recorded this and the previous behavior along with Lance's response to timeout directions. When Lance was singing at the end of 5 minutes, she reset her timer for an additional 2 minutes. Lance was quiet for the last 15 seconds of that interval so Mrs. Hinckly opened the door and directed him to return to class. Lance announced that he liked timeout and wanted to stay. Mrs. Hinckly entered the room so that Lance was nearer the door than she and gestured for Lance to leave. Lance re-entered his classroom and said loudly, "Miss me?" No one responded and Lance sat down. A few seconds later, Mrs. Robb came up to Lance and quietly directed him to pick up and to return Jill's math book. Jill, who had been working on an alternative assignment, and who had been coached by Mrs. Robb, thanked Lance politely.

Isolation or seclusion has several advantages over exclusion and other less restrictive timeouts. A good timeout room has no reinforcing properties, and the student is completely removed from classroom reinforcers. Peer attention or support is not possible while a child is in isolation, and the child cannot continue to disrupt the class.

Unfortunately, seclusionary timeout has many significant disadvantages that must be considered. Foremost among these is that it requires the presence of an adequate timeout room as described above. The effect of timeout from reinforcement can be delayed by the trip to an isolation room and the gradual aversiveness that builds over several minutes. When children resist going to the timeout room, some attention from teachers and peers to any further misbehavior is almost unavoidable. This also interrupts learning activities for everyone else. As with exclusionary timeouts, withdrawn children and youngsters who masturbate or perform other self-stimulations may be reinforced by the seclusion. Timeout rooms are also subject to most of the limitations described in the punishment section of this chapter.

Neither exclusions nor seclusions work when "timein" is not reinforcing or when timeout is reinforcing. This is a serious problem in many school settings where positive reinforcement cannot be controlled in exclusions to the hall, office, or a poorly constructed timeout room.

Timein, what regularly goes on in their classes, may not be reinforcing to some BD students. In this case, teacher and staff must strengthen interest, motivational, social, and formal reinforcement efforts. This alone may help to decrease inappropriate behavior, but if upsets do persist under these conditions, timeout can be an effective deterrent or consequence.

Guidelines for Responsible and Effective Use of Seclusionary Timeout

No set of guidelines can anticipate all needs and suit all timeout room settings. The following statements are aimed at effective use of timeout but with caution regarding the general welfare and rights of BD students:

1. Consider the use of isolation only for serious behavior problems (e.g., Arp, 1980, "behaviors that are destructive to property, aggressive to others, or severely disruptive to the class environment. General non-compliance, self-stimulation, academic refusal, etc. can be responded to with less stringent and restrictive techniques," p. 11).

2. Timeout rooms must be safe, stimulation free, outside the BD room if possible, and permanently constructed so that disruptions are muffled and rooms are not destroyed. With older students, a chair is appropriate unless the student demonstrates that it is a liability (the absence of chairs can lead to regressed and disinhibited behavior; we do not wish that isolation should be demeaning). An isolation room should meet the minimal physical criteria described above.

3. Local timeout specifications should be established and specific interventions should follow those constraints. Timeout guidelines should include documentation of incidents and a log of use. Development of guidelines might follow the suggestions of Wood and Braaten (1983).

4. Individual isolation timeout plans should reflect: (a) operational definitions of target behaviors, (b) pre-intervention rates and circumstances of target behaviors, (c) documentation of the use of less restrictive aversive interventions, (d) a review of additional other treatment approaches, (e) a setting analysis (e.g., Miller et al., 1985), (f) an on-going reinforcement plan for appropriate behavior, (g) planned reviews and decision guides, (h) provisions for monitoring (e.g., Gast & Nelson, 1977), (i) a statement of time of isolation and maximum time allowable given added increments for misbehavior in the timeout room, (j) provisions for dealing with resistance, (k) a plan for re-entry (may include a debriefing, a role play review, and/or behavior goal setting), and (l) written plans, IEPs, and permissions.

5. General practices for operating a timeout room include: (a) active involvement of parents in planning, (b) contractual arrangements for children 13 years and older, (c) brief timeouts (e.g., beginning at 5 minutes for each exclusion; beginning at 15 minutes or less for children of upper elementary age and older with upper limits of 30 minutes for each seclusion), (d) criteria of effectiveness (e.g., seclusions average no more than two times daily after the first two weeks of using the intervention, (e) a staff routine and practice activities for getting students to and monitoring the timeout room (emphasize precision, consistency, calm demeanor, warnings or other applicable language for use, etc.), (f) re-entry model, and (g) a procedure for increasing rate of reinforcement for positive behavior which is to resume shortly after the child returns but no comments on how well the student behaved in timeout.

6. Seclusion should never be planned when it is likely that the teacher cannot enforce it. Seclusion as a plan should be dropped in circumstances where extreme physical force proves necessary to get a student to timeout even if the efforts have been successful. Seclusion timeouts are often inappropriate

with older students who are prone to loss of control. It can be effective with older students who are tractable or cooperative, agree to the use of isolation, and use it on their own.

Systematic Exclusion/Administrative Suspension

Under this approach or policy, children are removed from all or parts of their school day following inappropriate behaviors. This action should be chosen with BD students only where there are physical risks to the child or others, extreme disruptions, and other techniques have been conscientiously tried but have failed.

Systematic exclusion may be planned when seclusionary timeouts or other punishment procedures have not been effective or when time in seclusion becomes excessive. The decision to exclude from school should come through a team process which reviews problem behavior incidents and explores all other possible options. Along with a plan for systematic exclusion should be a plan for timely and systematic re-entry. When seclusion is used with BD students, the procedures should be reported to parents and reflected in written plans and IEPs composed in cooperation with parents.

It is questionable whether systematic exclusion or administrative suspensions are effective in altering behavior. Time spent at home cannot be easily controlled, and reinforcement of inappropriate behavior is likely to take place. Decisions to choose systematic exclusion or suspension nearly always rest on the effects of inappropriate behavior on peers, staff, and the general school environment. A full discussion of this topic involves many administrative, legal, and ethical issues; it is beyond the scope of this chapter, but our reader is referred to Cullinan (1986) for a brief review.

COGNITIVE AND SELF-MANAGEMENT TECHNIQUES FOR DECREASING BEHAVIOR

There is a growing body of literature demonstrating the use of cognitive behavior modification and self-management techniques to change behavior patterns in children. While the chapter on self-control will discuss these in detail, there are some specific approaches designed to decrease inappropriate behaviors that we will discuss here. They share some aversive properties, but none are punitive and all offer some assistance in getting at the cognitive or self-control aspects of misbehavior.

Mediation Essays (ME)

A mediation essay (Blackwood, 1970; Marshall, 1981; Morrow & Morrow, 1985) is a pre-written printed dialogue for children to copy following a recurring misbehavior. A series of four questions and answers describes specific punishments that result from an inappropriate behavior. The dialogue also suggests more appropriate behavior alternatives and the rewards that follow a positive action. The essay is constructed with clear, vivid statements in the child's own vocabulary. The child is directed to copy the questions and answers word for word. The questions follow a standard sequence: What did I do wrong? Why was this wrong? What should I have done? and What happens when I do (appropriate behavior)? The following is an ME developed to reduce aggressions by a third grade boy.

What did I do wrong?

I didn't follow the school rule of not (hitting, pushing, etc.).

Why was this wrong?

If I do things like this to kids, I might hurt them. If I do it often, they won't like me and won't want to play with me. When I get caught I'll be in trouble. I'll be sent to timeout and have to write this paper. If I hurt kids, my teacher won't be able to let me play with them or be near them.

What should I do?

I should try my hardest not to (hit, push, etc.). I should treat other kids like they are good friends and like I want them to treat me.

What will happen if I treat the other kids nicely?

They won't be afraid of me and they won't want to hit me or get back at me. The kids will like me better and want to play with me. If I don't hurt kids, it will make my teacher and principal proud of me.

An ME is designed for a serious repeated problem. Following such a behavior, the child is directed to copy the ME prior to returning to full participation in the classroom. The essay described above puts into words what may be unclear to the child. It gives the child opportunities to rehearse the cause-and-effect relationships, and repetitions are thought to lead to internal verbal mediation which in turn leads to more appropriate behavior responses (Blackwood, 1970).

The act of writing a mediation essay is only mildly aversive. It should not provoke the greater agitation that often accompanies more powerful punishment (Rutherford & Neel, 1978). Because it is carried out quietly between teacher and child, it should be superior in effectiveness to oral reprimands. The contact required between the child and adult is minimal so very little short term reinforcement will be gained from this attention.

Gary is a junior high BD student who has problems taking other students' possessions. Ms. Cohen and her class consider Gary's behavior to be stealing, though he is not known to have taken expensive items or to have stolen anything in the community. A conference with Gary's mom indicated that he had similar difficulties taking things at home. Ms. Cohen considered restitution, but a simple plan was not apparent. Items were nearly always returned in good shape when they were seen or during Ms. Cohen's increasingly frequent shakedowns of Gary's locker and backpack. Daily checks for a week found from two to five items missing or wrongly in Gary's possession.

Ms. Cohen sat down with Gary and talked frankly about his stealing and its possible consequences. She used the ME question format described above and prompted Gary to give answers in his own words to complete the dialogues. Ms. Cohen did a little extra work in clarifying the long term consequences of stealing and suggesting a means for stopping oneself from stealing when tempted. She did this by having Gary paraphrase her statements in his own words. Gary and his teacher came up with the following ME.

What did I do wrong?

I picked up something that didn't belong to me, something that was the property of someone else.

Why is this wrong?

If I take things that belong to other people they are going to be mad at me and won't like me. They'll call me a "stealer" or a "thief." If I take things that don't belong to me, I'll get into trouble with my parents, teacher and the school principal. If I make it a habit to steal, I'll get into big trouble with the police.

What should I do?

I shouldn't take things that don't belong to me. If I see something that I'd like to have and if I think I'm going to take it, I have to tell myself "Stop!! I can't take that, it doesn't belong to me!!" Then I have to get myself away from that place and go someplace where there are people around.

What will happen if I can stop stealing?

I won't get in trouble with my parents or teacher. Other kids won't think that I'm always taking something of theirs. They will like me and trust me better. If I can stop myself from stealing now, I won't have trouble stealing when I get older. I can show people that I am responsible and that I can take care of myself.

Ms. Cohen felt the "Stop" phrase was very important to help Gary resist temptation. The words and the message were meaningful to Gary, and he didn't like to think about the negative consequences. When Jack's Hawkeye pen was found in Gary's locker at the end of the day, Ms. Cohen have Gary the directions to copy the essay two times. She also said that if he didn't complain, did a very neat job and could tell her in his own words what was in the essay when he finished the first copy, she would let him skip the second copy. Gary's body language said he was upset, but he did not complain. He copied the ME and could say most of the important points with some cueing.

On several subsequent stealing occasions, Gary was more upset and claimed to have "just borrowed" the item. Ms. Cohen didn't discuss it with Gary except to say that it was not his, and he should not have had it. When his upset continued, she required that he copy the essay two full times. She made him unrumple and straighten out the printed copy; as a precaution she had a printed copy laminated for future use.

Gary copied the ME on five occasions in the first week but only two times in the next 2 weeks. The frequency of reports of missing items dropped sharply. Ms. Cohen left the program in effect for 2 weeks more without any missing items and then decided to announce a formal ending to the program.

The ME can be used with a much broader classroom management system for several specific behavior problems concurrently. It is most effective with behaviors of moderate frequency (e.g., three per week

up to one or two times per hour); with intense, discrete and on-going acting-out behaviors; for children with adequate language and writing skills to make the essays meaningful; and for children who may be impulsive, unmotivated to change, unaware of the consequences involved, but not strongly oppositional to authority (Marshall, 1981). It is also easily applied in many unstructured situations such as recesses, buses, lunchrooms and assemblies by paraprofessionals with backup from principals and teachers (Marshall, 1984).

Required Verbal Mediation Practice

Intermediate behavior management steps are frequently required in moving BD children from the external structure of positive reinforcement and punishment systems to self-control. Some children can be successful with surface management techniques or if they have benefited from social skills training or counseling. Other youngsters continue to be too impulsive or too prone to upset and relapse into old thinking and coping patterns. If children do not show the necessary skills, attention, and commitment to move to self-control plans, there are intermediate steps that may be taken.

An intermediate intervention for decreasing inappropriate behaviors is required verbal mediation practice (RVMP). It might be useful with children somewhat more mature, reflective, and motivated than children for whom we would choose to use mediation essays. With RVMP children are directed to practice reading aloud or to themselves pre-written statements. These statements are designed to provoke thoughts which help the youngster avoid future inappropriate behavior responses or help the child deal more successfully with the antecedents that reinforce or elicit those responses.

> Mrs. Flynn had been very successful in reducing Dagmar's temper upsets through the reinforcement of appropriate behavior and work completion, the use of brief timeouts, and a system of Dagmar alerting the teacher when she was becoming frustrated. Mrs. Flynn had worked with Dagmar on self-instructional techniques for problem solving, relaxation, and self-praise, but Dagmar didn't seem to be able to use self-instruction on her own. When Mrs. Flynn was there to remind her and caught her before she became upset, Dagmar experienced good results with the self-instructions.
>
> Mrs. Flynn sat down with Dagmar and printed out some cue cards with the self-instructions for: dealing with difficult assignments, problem solving when stumped, relaxing her three major muscle groups, and positive self-statements. The sentences were brief and in Dagmar's own words. For three days Mrs. Flynn required Dagmar to read the four cards to herself before beginning each major seatwork assignment. During those days Mrs. Flynn observed Dagmar closely and cued her to read the cards when Dagmar appeared to be becoming upset or frustrated. After the third day, Mrs. Flynn merely reminded Dagmar to look at her cards in the morning and at anytime when she felt uptight, upset, or stumped.
>
> After one week Mrs. Flynn noted that Dagmar was going to timeout less often and was requiring less help from the teacher. Occasionally, Dagmar was observed to read the cards on her own, but soon she was only glancing at them each in turn. Mrs. Flynn felt that Dagmar was probably clear enough about the content of each card by now, and glancing was okay.

RVMP is not an aversive procedure, and it is a step up the ladder toward self-control from other behavioral interventions. The reader might recall that Dagmar's problem is similar to those experienced by students in Ms. Fran's class. They required the use of overcorrection because they were not ready for Dagmar's level of self-control. The RVMP format is similar to contingent effort or positive practice, and its relationship to behavior problems makes it a punishment by definition. Other applications of RVMP have involved reviews of appropriate behavior for frequent impulsive misbehavers, the steps of various social skills such as negotiation, positive self-statements in response to self-derogations in behaviorally-oriented assertive training, and disputations of irrational beliefs to deal with mood problems in a form of rational emotive therapy.

Reinforced Self-Evaluation

Reinforced self-evaluation is a self-management approach that relies on behavioral reinforcement and punishment (e.g., earning and losing points) for reducing inappropriate behavior. It is particularly useful for children who have the skills to use self-management programs but are dishonest or unmotivated. The typical format of self-evaluation (see chapter on self-control) is combined with added tokens or points when children rate their behavior accurately and with a loss of points (response cost) when they rate inaccurately.

Mr. Jones, who had good success in working with Lola on DRL program for reducing self-deprecations (see overcorrection section), felt the same approach might work with Elijah. Elijah frequently swore in class, disrupting the class some and upsetting Mr. Jones more. Mr. Jones felt that the first half hour of both the morning and afternoon were the peek times for swearing, and he documented it for 1 week. Elijah was aware of Mr. Jones' counting, and his rate of swearing dropped sharply for 2 days before rebounding to the previous level.

Elijah liked the sound of earning extra points for free time when Mr. Jones described the problem and plan to him. Elijah also agreed to help keep records because Mr. Jones was not always able to do so. Problems with the plan soon emerged when Elijah's counts began to be lower than Mr. Jones' occasional records and recollections. When in doubt, Elijah was reinforced with tokens. Mr. Jones decided to revise the plan to put a premium on Elijah's accuracy. The current DRL level of three swear words was retained. Mr. Jones added the following contingencies: (a) if Elijah's rating was within one of Mrs. Jones', Elijah earned double points if the number of incidents was three or less points and (b) if Elijah's rating was greater than one from Mr. Jones', Elijah would lose three points even if he was below three cuss words. Elijah's ratings improved considerably though he still swore once in a while. Mr. Jones and Elijah agreed to keep the plan going for the present, but Mr. Jones would make only secret records two times each week as spot checks.

Many other applications of self-control principles have appeared in recent professional literature; it will not take long until we have a host of new nonaversive management techniques for use with BD children. These approaches offer hope that we will eventually be able to help limit many serious behavior problems without needing to use some of the more aversive methods reported here.

CONCLUSIONS

We believe that use of punishment, timeout, and other aversives is necessary in dealing with children in BD classrooms. Good teaching can greatly reduce their use and deal effectively with most problem behavior. The methods described in the previous chapter and in the first sections of this one are extremely powerful, flexible methods of reducing inappropriate behavior. Before employing more aversive methods, careful consideration must be given to the type and quality of nonaversive interventions that have preceded. Half-hearted trials, inept or poorly planned applications, and reluctance to make the necessary effort are poor excuses for choosing punishments, seclusionary timeouts, or other aversives. Best standards of practice and monitoring (e.g., Skiba, Casey & Center, 1985-86) and the broad range of nonaversive interventions (e.g., LaVigna & Donnellan, in press) need continually to be considered and reviewed.

The information provided in this chapter is intended to guide experienced clinical teachers of BD students. Unfamiliar approaches that may have briefly described should be explored further through references provided, professional colleagues, and other resources. Even with the strongest possible efforts by the best teachers with the most complete support services, the approaches described in this chapter will falter after initial success or will even fail completely. Effective teaching of children in BD classrooms requires careful assessment of children, thoughtful selection of interventions, careful monitoring and evaluation, continuing modification and alteration, and, frequently, starting over with an alternative approach. Even when interventions are effective, we should begin to prepare for work towards positive alternatives, self-management approaches, and social skills development.

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SECTION THREE:
BEHAVIORAL SKILL DEVELOPMENT

Chapter 6: SOCIAL SKILLS TRAINING

Chapter 7: AFFECTIVE/EMOTIONAL GROWTH

Chapter 8: SELF-CONTROL STRATEGIES

Chapter 6

SOCIAL SKILLS TRAINING

Mary Green-Somerville
Education Consultant
Child Psychiatry Services
University of Iowa
Iowa City, Iowa

Polly Nichols, Ph.D.
Education Consultant
Child Psychiatry Services
University of Iowa
Iowa City, Iowa

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Chapter 6

SOCIAL SKILLS TRAINING

Mary Green-Somerville
Polly Nichols, Ph.D.

SCOPE AND PURPOSE OF THIS CHAPTER

In Iowa, programming for students with behavioral disorders has been enriched throughout the eighties by the inclusion of social skills training. The Project Iowa monograph published in 1984 entitled Social/ Affective Interventions in Behavioral Disorders (Grosenick, Huntze, McGinnis, and Smith, Eds.) featured two excellent chapters on the subject: Teaching Social Skills to Behaviorally Disordered Youth by Ellen McGinnis and Teaching Social Routines by Richard S. Neel. McGinnis describes the essential components of the social skills training class and the generalization of this training to the student's broader environment; Neel proposes the teaching of social routines to children directly within their usual environments. Between them, these authors have presented a comprehensive explanation and discussion of this critical area from two vantage points. Most Iowa teachers in the field of behavioral disorders are acquainted with these important works; sections of them are reproduced in this work for ready reference (See Appendix).

As authors of this chapter, we chose not retread theoretical ground already covered, but to deal with pragmatic issues of day-to-day concern to teachers. As we teach children from many Iowa school districts and visit their home community schools, we have found that many teachers are wary or uncomfortable with the idea of incorporating social skills training regularly into their programs or have not yet found a way to fit it into busy schedules. Our purpose for this chapter is to try to allay the most common misgivings we have encountered and to discuss practical issues and techniques to help teachers get started. Our suggestions are based on our daily experiences helping our students acquire or use social skills and on our sharing of ideas and concerns with our colleagues and counterparts in local public schools.

WHY WE TEACH SOCIAL SKILLS

Children with behavior disorders require social skills training—a simple statement but an essential point. A review of reasons why children are initially referred for special education assistance validates this need. Their behaviors of concern occur in the school environment, that is, in group settings. We term those with conduct problems "undersocialized" because they violate norms of behavior in dealing with authority figures or peers; we call others "withdrawn" when they avoid or are overwhelmed by normal social exchanges; autistic students' disorder is primarily identified by impairments in social interactions. A result expected by referring teachers, parents, and the child is that something be done to replace these behaviors with positive, age-appropriate interactions. In an era when schools are under increasing pressure to show results, the BD teacher is responsible for demonstrating that students have become more socially competent than they were when first identified as needing special help.

Definitions of social competence may stress any one of several dimensions of this broad concept such as meeting societal expectations or interpersonal problem solving. According to Eisenberg and Harris (1984), the central issues are peer acceptance, friendship, and quality of social interaction. The BD teacher's task is to teach children to handle social situations in ways different from those that have been unsuccessful in the past, to break unproductive habits, and to gain control over their own thoughts and actions (Nichols, 1984).

As the BD teacher sets out to teach the steps to achieving competence, it is helpful for him or her to consider why children have failed to learn to behave. Cox and Gunn (1980) point out four reasons that have implications for designing social skills instruction. First, children may not know what behavior is socially acceptable. This may reflect poor attention to the "right way" of behaving or may indicate an absence of positive models. Some children may know what should be done in a general way but knot know where or when to do it. Gresham (1981) differentiates between children who have skills deficits and do not know what to do and those who have performance deficits, knowing what is expected but not doing it. For the teacher, this means that skills need to be taught in clear, concise steps and drilled to the point of overlearning in a variety of situations and settings.

A second explanation offered by Cox and Gunn for the lack of social skills acquisition by some children is the absence of strong rewards for displaying positive behavior. To compensate, teachers can reserve some highly desired reinforcers (tokens, privileges, activities) or "up the ante" with an existing classroom

reward system for those students who are active participants in social skills class and practice those skills during other times of the day. Then the authentic social reinforcement that comes from being a positive member of the general school community can be experienced.

A third explanation offered for misbehavior is interference caused by high emotional states. The child (or adult, for that matter) who is stressed by feelings of anger or fear, physical fatigue or illness, is prevented from thinking clearly and responding favorably. To reduce this interference, components of self-control training (Chapter 6) must be included in social skill practice. This may be done in a kind of shorthand method by using quick-relax techniques and rote self-talk statements which allow the child those critical seconds of time needed to avoid negative reactions and to engage in positive action.

Finally, many children who are in BD classes have received a great deal of attention for their negative behaviors. A well-designed classroom will reverse this situation and see that attention is gained for prosocial behaviors. Combining social skills training with a positive management system (Chapter 4) and efficient methods to deal with misbehavior (Chapter 5) will greatly enhance the chances of getting results that can be described as increased social competence.

POSSIBLE MISGIVINGS ABOUT TEACHING SOCIAL SKILLS

As a teacher faces the challenge of developing a social skills training program, a number of concerns may arise. Uncertainties about where to begin, what skills to teach, what available published curricula are most appropriate for the age group of interest, and how to fit a group class into an already busy schedule are common. In previous attempts to conduct social training, behavior problems such as inattentiveness, negative responses, or active resistance to positive suggestions may have led to discouragement and even to disbanding the class. The teacher may have an impression that psychologists, social workers, or consultants have special knowledge of social skills training that they themselves lack. In some cases, once-a-week sessions taught by support personnel may not have resulted in the behavioral improvements expected, leading to skepticism about the usefulness of these techniques.

The sections of this chapter that follow address some of these misgivings and concerns. Their purpose is to encourage teachers to take another look at social skills training, recognizing that it is a challenging subject but "doable" and very rewarding.

"Children seem to resist changing their social behaviors."

While teachers are often left to speculate on the developmental and environmental factors that have contributed to the negative social behaviors observed in children, there exists a very "teacherly" concept which can lead to an optimistic view of the potential for change. In The Essentials of Teaching (1971), Bateman suggests that every child at any point in time is ready to learn something. Even if the child's problem history spans 5, 10, or 15 years, it is possible to find a starting point where success can be achieved and a new trend can begin. The setting of a special class can represent a safe, supportive place to begin the task of replacing old habits with new behaviors that lead to more satisfying relationships.

"Teaching social skills is hard to do and requires special training and expertise."

Teaching well is hard to do and requires special training and expertise. Teachers of behaviorally disordered students have expert knowledge of how to work with hard-to-teach students. Social skills training is teaching; the curriculum is every day behavior. The instructional and behavior management skills to teach any subject needed, and every day behavior is part of everyone's life. What is needed to get started is a task-analytical perspective, some practice, and the determination to do it.

The fact that social skills are every day behaviors does not mean that all teachers automatically know how to teach them. Teachers know how to walk but cannot remember how they learned to and would not know how to provide physical therapy. But most teachers do know how to teach reading, another automatic activity for most people. They know how to break the task down to its component parts, analyze the errors made by the poor reader, teach remedial strategies, and provide a lot of practice and feedback. In other words, they know corrective teaching. Social skills are taught in the same way. As in teaching disabled readers, teachers don't spend much time pondering the root causes of their problems—they simply identify their behavioral deficits and get on with teaching them how to get along better. Curriculum choices for social skills instruction are made on the same set of basic principles as for any other subject.

Teachers are one of the largest groups of behavior therapists in the country, expert in the technologies of behavior change. Nevertheless, some BD teachers may still have low professional self-esteem, a leftover from the days when we were kept in our place and told not to venture into the realm of therapy. Some

may still feel that when it comes to anything outside of classroom life, they should call in experts—psychologists, counselors, social workers. In truth, when it comes to social skills training, teachers are much more expert than their colleagues from other disciplines whose training is primarily in one-to-one interactions with students. Life is lived in groups. Teachers of social skills classes use the group to teach children how to live with others. They have the specific skills needed to control a group, to handle individuals' needs and problems within a group, to provide direct instruction, to demonstrate how things should be done, to encourage student participation, to assign homework, and to reward improving performance. These add up to all the expertise that is needed—the content is well laid out in published manuals and may be gathered from a thousand every day observations.

"Teachers have a more thorough command of academic and vocational curriculum than of social skills."

This claim is true if "curriculum" is confined to those subjects preservice teachers were taught in methods courses. Most social skills training materials and manuals have publication dates in the 80s. (Several are discussed in this chapter, and others are listed in the reprinted reference list by Neel.) This newness makes for uncertainty, but in fact, teachers have been working to help youngsters get along better with others all along and already have the teaching skills to do so. The BD teacher will need to suit the curriculum she or he chooses to the age, learning characteristics, and maturity of particular classes.

PLANNING FOR SPECIFIC AGES AND DEVELOPMENTAL LEVELS

Steven's landmark book Social Skills in the Classroom, published in 1978, is geared toward very young and/or developmentally immature students. The 136 skills include Environmental, Interpersonal, Self-Related and Task-Related Behaviors (Goldstein, Sprafkin, Gershaw, and Klein, 1980). Another early, influential book by Goldstein and his colleagues is entitled Skillstreaming the Adolescent (Goldstein, Sprafkin, Gershaw, and Klein, 1980). It includes 50 such skills ranging from Beginning Social Skills, the most basic, to Planning Skills, the most advanced. Situations that are appropriate for teenagers are offered for practice. Both manuals include, for instance, the basic skill of listening, but the language and examples are designed for distinctly different age groups. McGinnis adapted Goldstein's skillstraining curriculum for use with younger children and, with him, published Skillsteaming the Elementary School Child in 1984. This serves as a good example of how cognitive and maturity levels have as great an impact on curriculum choice as do age and basic intelligence. We make the McGinnis and Goldstein book, ostensibly for elementary age children, the main resource in our BD class even for use with high schoolers because the skill steps and language are simple, concrete, and accessible. Situations are changed to fit our students as closely as possible which is, of course, a basic requirement of all social skills instruction as we build for generalization.

In most social skills curricula, the skills to be taught are presented in a hierarchical order, starting with basic ones and ending with those deemed more complex or requiring greater student maturity. All authors, however, recommend selecting specific skills to be taught on the basis of deficiencies observed by teachers or recognized by the students themselves. Within a set of skills determined to be lacking among a group of students, it makes sense to start work on those that are related to the mastery of others, but the acquisition of social competence is not based on mastering a precise progression of specific subskills. Unlike math where one must know how to add before one can multiply, in social skills the order may vary. A student may be good at giving compliments (an advanced skill) but be a very poor listener (a basic skill).

A key skill the teacher needs for teaching social skills, regardless of the particular curriculum selected, is task analysis. The skill steps presented in all of the social skills manuals have been listed by the authors out of their own experiences, observations, and common sense. None has been individually studied and validated as being the proven way to achieve one social goal or another. For any given individual, group or setting, it may work best to add, combine, delete, or reconceptualize the series of steps that comprise a particular skill. Decisions to do so are based on close analysis of just what things must be done to reach a social goal in a specific setting, where the students' present performance levels are, what prerequisites are needed, and how much practice they will need to reach mastery.

To feel as much in command of social skills curriculum as of academic or vocational instruction simply takes doing it the first time, exactly by the book (whichever one you choose), for a nine week period or a semester. The presentation format is the least familiar aspect of social skills training. At first, planning role plays (both the teacher's and students') may seem a little daunting. Have no fear. Every manual discussed here assumes that the teacher is new to the technique and describes (or, in some cases, shows

on videotape) just how the skills will be modeled. Lessons and activities are fully described. In the case of Walker's ACCEPTS program (1983), complete scripts for all lessons are even provided. By the time the directions have been followed for teaching a group of students a series of these social skills classes, the teacher will have superimposed a new set of behavioral skills upon his or her present expertise in corrective teaching.

Social skills training sessions must be scheduled on the same basic premise as are skill-building academic subjects. They must be frequent enough that students can remember the steps, will practice them often and will maintain a level of awareness intense enough to prompt their real-life use. For primary-age students, Camp and Bash (1981) recommend that their Think Aloud program be taught 30 minutes a day for a minimum of three times a week; for elementary grades, Walker (1983) recommends that the ACCEPTS program be used daily for no longer than an hour; for mainstream adolescents, Goldstein and his colleagues (1980) recommend two weekly sessions. McGinnis (1984) recommends holding sessions three to five times a week; 20 minutes for grades one and two; 20-30 for grades three and four; 30-40 for five and six.

School social workers or psychologists may be perceived as being potentially better trained trainers than are BD teachers, and arrangements are sometimes made for them to run groups on their scheduled days in schools. They are likely to be excellent team-teaching resources, but it is unlikely that they can schedule the frequency of sessions necessary for success. More importantly, the BD teacher is in the better position deliberately to integrate social skills lessons into the everyday life of special class and mainstream activities.

"There is so much to be done, so many skills!"

A cursory review of texts on social skills or skill listings contained in published programs can appear overwhelming. This may be similar to one's reaction to seeing a scope and sequence chart of reading or math skills for an elementary or secondary curriculum. The reaction, "How will we cover ALL THIS!" is justifiable. Since the age-appropriateness of specific skills is so difficult to pinpoint, many authors purposefully avoid designating age levels for the identified skills. Even if a concisely designated set of skills were available for a particular grade or age level, BD classes generally span three or more grade levels.

Fleming, Ritchie, and Fleming (1983) developed an approach which organized a year long social skills training program into sequential phases which consisted of inhibition training, problem-solving training, and prescriptive skill training with BD students, ages 9 to 13. This type of unit teaching provides a helpful general framework for group instruction. The addition of an introductory unit which emphasizes the immediate rewards for positive behavior, both verbal and nonverbal, can set the stage for teaching children the steps of behaving in ways that will make the world smile upon them.

"How will I know where to start?"

To carry the academic class analogy one step further, we decide where to start in a social skills sequence much in the same way as we decide where to begin teaching a math class. We watch our students' performance closely and analyze how they do what they do. When we notice failure, we check to see if they have the skills that are prerequisite for success. We do not teach what they already know, though we will see that it is practiced. We are especially careful not to assume they will do things the right way just because "they ought to know by now." Unlike starting an academic class, however, our teaching goals will be set as much or more by others' opinions as by printed scope and sequence tables. What will it take for these youngsters to meet reasonable expectations of parents and family? Neighborhood storekeepers? The playground supervisor? Their classmates?

As students are identified as eligible for BD programs, the referral and assessment information contains statements of the problems the students experienced leading to the special class placement. By translating problem areas into positive behaviors, the teacher can specify the needed social skills for each student's individual educational program. If a student was impulsively not following directions, engaging in frequent fights with peers, and being verbally aggressive toward adults, then the skill areas of showing listening, following directions, joining activities, expressing feelings, and compromising will be appropriate.

Daily observations of students in BD programs in and out of the classroom can be used to identify necessary skills. As teachers observe or hear reports of the students' misbehaviors, answering the question, "What do I want them to do instead?" will identify a starting place and directions for future prosocial skills training.

In addition to these informal approaches, standardized instruments and skill checklists from published programs can also be used to collect information about students' social skills needs. Two standardized assessment instruments are available, The Matson Evaluation of Social Skills with Youngsters (1983), nicknamed the MESSY, includes a 64-item questionnaire for the teacher to complete and a 62-item one for the student him or herself. Factor analysis of the Teacher Report provides norms on two dimensions: Inappropriate Assertiveness/Impulsiveness and Appropriate Social Skills. Responses on the Self-Report for students may be evaluated on five factors: Appropriate Social Skills, Inappropriate Assertiveness, Impulsive/Recalcitrant, Overconfident, and Jealousy/ Withdrawal. Means and standard deviations for total scores are also reported, normed on 422 Catholic and public school children, ages 4 through 18, and 322 of their teachers, the MESSY's items readily stimulate ideas for social skills lessons—"I brag about myself," "I slap or bite when I am angry"—as well as allow children to note their strong points—"I keep secrets well," "I know how to make friends." Items on the Teacher Report almost exactly parallel those from the Self-Report, so comparisons are possible item by item as well as on the basis of summary scores.

The second instrument is the Waksman Social Skills Rating Scale (1984) which was normed on a sample of 331 kindergarten through high school students from both regular and special education classes in the Portland, Oregon, metropolitan area. The WSSRS is very short, containing only 21 items to be completed by a teacher, counselor, or child care worker who has daily contact with the child or adolescent. Scores are obtained for the Aggressive Domain, Passive Domain, and a Total Score. No input from the students themselves is gained, and items describe only problems, not strengths. The items describe behaviors which are targeted for remediation in most commercial social skills training programs. The author suggests such uses as screening, identifying behaviors for intervention, and program evaluation.

Most published programs contain skill checklists which can be completed by the teacher, the student, and the parents. Besides assessing the rater's perception of skill competence, completing the checklists also builds awareness of the skills that may be covered in the program. This may spark the interest of both the student and his or her parents, increasing their willingness to participate in and support instructional and homework activities. Summarizing individual ratings on a group profile sheet can reflect deficits shared by several members of a class where they are not included, the teacher can develop a student questionnaire that parallels the adults'. Students tend to be remarkably honest in their self-evaluations.

"Won't students become weary of repetitive social skill lessons?"

This concern may be due as much or more to the teacher's need for variety in teaching formats as to the students' needs. Children frequently find the predictability of a structured lesson comfortable, and the repetitious nature of presenting skill or problem solving steps in a familiar format greatly enhances later recall, an essential part of generalizing and maintaining the learned behavior.

The realities of teaching social skills on a daily basis throughout the school year and over a two-to-three year period with some students makes the infusion of new ideas for methods, materials, and activities a necessity. Teachers gain a lot from informally sharing experiences and ideas with each other, and the exploration of complimentary behavior change programs is also highly worthwhile. Lessons on Becoming a More Pleasant Person is a manual which describes the auxiliary units we include regularly in our social skills training classes including Cost/Payoff Analysis, Problem Solving, and STAR Impulse Control lessons. This was supported by (Green-Somerville & Nichols, 1986) Project Iowa. Assertiveness training, the investigation of the verbal and nonverbal differences between passive, assertive, and aggressive ways of responding, is a fruitful area that fits well into a skills training approach. Modeling of variances in body posture, voice tone, and facial expression of these three response styles make an interesting series of lessons to heighten self-awareness and identify areas for desired change (for instance, see Waksman & Messmer, 1985). Teaching and practicing such communication skills as active listening and perception checks (Gazda, Walters, & Childess, 1981), making "I statements" (Gordon, 1974), and asking open-ended questions is a valuable set of supporting skill classes.

Identifying interesting small-talk topics can lead to discovering common likes and dislikes which in turn may be developed into interviews and written descriptions of classmates, a teacher, a staff or family member. Individuals may be responsible for introducing a new classmate or student from another class to the rest of the group. The skills learned in social skills classes are useful when applied to more general social issues such as school rules, community problems, or world-wide current events. These discussions can be compiled into articles and art work which can be developed into a class newspaper.

When the teacher senses a level of fatigue or saturation with structured skill teaching, the time may be right to delve into more selfcontrol or cognitive behavioral interventions (see Chapter 6). It is often

useful to seek a second opinion from a support person such as a psychologist, social worker, or consultant who is familiar with the group and the content that has been covered. A team brainstorming session often results in fresh directions for a weary social skills program.

"Will changes in social competence transfer to the real world?"

The point of social skills training is to teach students how to interact with others—not just during classroom sessions, but wherever in their worlds they are. It is surprising, then, that of the 33 studies Gresham (1981) reviewed, only two (6 percent) assessed or demonstrated generalization of social skills across situations and only seven (21 percent) addressed the problem of maintenance over time. Encouragingly for social skills teachers, when these key factors have been assessed, the results are often positive.

Oden and Asher (1977) found their elementary students to have maintained their increased acceptance by peers a year later (maintenance) and to have made new friends among their classmates (generalization). Sarason and Sarason (1981) worked with 127 high schoolers with high potential for dropout and delinquency. Four months after their training sessions ended, they advertised a genuine job opportunity and videotaped the interviews. While the numbers of applicants were small from both subject and control groups, the social skills trainees were judged significantly more effective and had significantly better eye contact than the controls. At the end of a year, the whole group of target students also showed significantly fewer absences, tardiness, and behavior referrals to the office than did controls. The researchers hypothesize that the fact that they had been trained to think of more, and often better, alternatives to problems generalized to this overall improvement in school behavior.

Chapter Seven in this publication details the main elements needed to plan for and promote generalization and maintenance. Among the most crucial for social skills training are these:

Teaching children to generalize. In one sense, generalization is the core of the social skills curriculum. Every discussion and every activity is focused on the real life situations for which classroom activities are merely practice. An excellent example of how these plans are integrated into each phase of a curriculum is demonstrated, complete with forms ready for copying, in McGinnis' Project Iowa monograph reproduced here. Homework assignments teach self-evaluation of progress as well as direct practice in real-life situations; they are crucial to every social skills curriculum.

Using reinforcers already present in a student's environment. Although extrinsic reinforcers of many kinds may be used to encourage attention and effort in social skills classes, the best rewards come from the social reinforcement that is sure to follow improved social behavior. Whenever social achievements are noticed—avoiding trouble with a principal, sharing a toy, ignoring teasing—the teacher congratulates the student on successfully using that particular skill. This strengthens her sense of self-control and mastery over happenings in her life and makes it likelier that she will use the techniques again.

Planning for variety using different teachers and settings. Mainstream teachers and administrators can play a major role in generalization if they are involved in the training strategies. Many skills deficits cluster around the problems some young people have dealing with authority figures. The Boys Town Model focuses its social skills component on exactly this issue, and each disciplinary interaction a student has with the office becomes a training session for accepting responsibility for one's misbehavior and offering a courteous apology.

When a skill such as accepting criticism or making a request has been mastered in the classroom, it can be meaningfully reinforced elsewhere by alerting teaching colleagues and asking them to encourage the student in its use. This can be done both naturalistically (by smiles and increased responsiveness) and formally (by checks, initials, tokens, or higher grades). Many BD teachers ask mainstream teachers to complete brief rating forms for their students in their classes, and targeted social skills can be included on the list.

Variety in settings can be achieved in mini field trips and regular out-of-class activities. Once class spent a morning soliciting small contributions from grocery stores toward a fund raising baking project for Ethiopian relief, withdrawn students were taught and coached to make all the requests with good eye contact, a pleasant face and a calm, clear voice. The success of the project was a powerful reinforcer. The playground or lunchroom is a fertile field for social skills development. Students can set social goals for themselves and help coach and provide feedback to classmates as well.

Two components of some social skill training curricula appear to have particularly high potential for increasing generalization and maintenance. Both are cognitive behavioral interventions and while that topic is fully covered in chapters on self-control training and affective interventions, they need also to be included here.

Building from the concrete to the conceptual. Each social skill is taught as a series of distinct steps, and pains are taken to be as concrete and specific as possible about the situations in which they are likely to be used. Over the course of the training sessions, the labeling of steps and mistakes should move from the concrete ("Ask yourself—am I being teased?") to the conceptual ("Think and plan") (Kendall, 1981). These broad rules are then available in the student's mind to be applied to any social situation that might occur any time, any place.

Teaching students to use self-instruction. Meichenbaum (1977) has demonstrated that teaching children actually to verbalize general strategies for self-management will increase their behavioral control under a variety of stimulus conditions. For instance, Zahavi and Asher (1978) taught aggressive preschoolers three general concepts: (1) aggression hurts another person and makes the person unhappy; (2) aggression does not solve problems; and (3) positive ways to solve conflicts are sharing, taking turns, and playing together. Then they asked each child two questions about the effect of aggression on others and prompted verbal replies to these questions. After these coaching sessions, which lasted just 10 minutes, observations revealed that subsequent aggressive acts were significantly reduced.

Incorporating specific verbal cues as self-instruction into social skills training appears to increase the effectiveness of that technique so markedly that it is justifiable to incorporate that component into all skills series. Most phrases come from students themselves—"Stop . . . No more trouble for me . . . I can handle it . . . Use a calm, series voice . . ." They are repeated aloud, said in unison, whispered, thought, and written on cards to be kept in a pocket, in a notebook, or on a mirror. The goal is to have them instantly available in students' heads so that even when something completely novel stimulates a negative response, the phrase flashes to their minds and gives them control of themselves in the situation. This approach is supported by Sarason and Sarason (1981):

> Because the generalization of acquired skills seems to be a major difficulty in much of the work so far reported, a major effort was made to incorporate as many procedures as possible that would encourage the students . . . to integrate the skills learned into their behavioral repertory. The most effective format for this process appeared to be incorporation of a cognitive skills format into a modeling approach already shown to be associated with long-term behavior change . . . (p. 917)

"Special education programs, especially self-contained with integration rooms, have limited time for social skills instruction."

BD teachers who are experienced in social and cognitive skills teaching view it as the most important activity of the day, and so its time is allotted first. The opposite view is that everything else has priority over this "non-credit course," and so it must be squeezed into spare or study hall times. The worst view is that it is not really a class at all, but a counseling endeavor that should be undertaken by the school psychologist or social worker on an appointment basis once a week or month.

Considering the status of BD students and again recalling that they are in special programs on the basis of having been staffed and certified as youngsters with behavior disorders, then it is the teacher's first responsibility to help alleviate these behavior problems. In the past, teachers have counted on doing this primarily through structure and behavior management techniques that were ongoing while teaching academic subjects. Now that we have the skills and materials to do so, our charge is to teach students new ways to solve problems, build relationships, and reduce aggression. These must be given top priority with the enhancement of academic growth.

BD teachers and their colleagues in other special education areas are too often forced into the role of support staff for mainstream teachers. Some use all their available periods scrambling to help their kids meet other teachers' expectations, some of those beyond reach or reason. Where this is a problem, teachers must assert their students' rights to free, appropriate education—with school and district administration if necessary. It is not appropriate to have a professional team of experts assess a youngster as qualified for an expenditure of special education dollars on the basis of documented behavior disorders and then spend all of those dollars helping him or her get homework done. If we have a student for only one resource period a day, that period needs to be spent teaching social skills and related personal and interpersonal competencyraising activities. This needs to occur, at a minimum, three days a week. In self-contained programs, the minimum will be one period daily.

Effective scheduling of social skills groups within a resource room or self-contained with integration program may be difficult. Groups should number between three and eight with larger usually being better than smaller. The makeup of each group may be—actually should be—quite diverse. It is not necessary

to group aggressive students in one class, withdrawn in another, immature in a third. Diversity of coping styles and social strengths provides a full range of modeling and feedback opportunities. The tough boy may teach the shy girl how to fit into a conversation, while she may teach him some techniques for avoiding trouble. A group that may have been gathered simply on the basis of who was available third period is likely to end up being an important source of support for all its members. This group is likely to offer feedback and problem solving ideas that are in contrast to the students' usual peer groups, and members may be looked to for advice and comfort.

The argument for creating diverse groups for social skills training receives indirect support from the literature. An essential component of social skills training is the modeling for desired social behaviors. As Bandura (1977) and others have demonstrated, it is not enough simply to place socially inept students in classrooms with socially competent ones and expect them spontaneously to do as they see; the appropriate behaviors that are demonstrated must be pointed out, the behavior must be seen to gain rewards from doing well, the model must be seen as competent and yet as nearly like the learner as possible. The teacher begins by demonstrating a social skill to be learned or uses a videotaped model, but as soon as the students begin to role play in front of the class, they become models, too. By first selecting a student who is likely to demonstrate the skill effectively and whose relative successes are known to group members, modeling effects are greatly enhanced.

Many curricula, such as those by Goldstein, et al (1980) and McGinnis (1984), are designed to be taught by a teacher and an adult associate. This is desirable, especially for the first series of classes attempted, but it is not absolutely necessary. When effective modeling of a skill requires another adult, the lone teacher can borrow someone just for that activity. The principal, the janitor, or a free teacher can be pressed into temporary service with the added benefit of involving and educating other school personnel about what the group is doing.

When members to be served in the total program are large, and scheduling cannot be arranged so that, for one period of the day, only students who will make up the social skills group are in the room, extra teaching assistance must be provided for the other students. This will be minimally necessary every other day. Cooperative scheduling and teaching trade-offs with special educators and teachers of "specials" who may also meet students on an every-other-day basis will have many payoffs for the whole program.

"What about multicategorical classes with only a few BD students?"

A special circumstance that the teacher of a multicategorical resource or integrated program teacher may encounter is that of having only one or two BD students to teach—and these possibly of widely different ages.

This chapter is written specifically to describe social skills training of students identified as having behavioral disorders. The structured teaching methodology described is especially appropriate for this population. However, long before these curricula were available, social skills training was of major concern to psychologists and teachers, particularly those working with youngsters with mental disabilities. This full spectrum is summarized in a helpful review by Gresham (1981). The social deficits of students with learning disabilities are also well recognized and are well reviewed by Dudley-Marling and Edmiaston (1985). It is virtually certain that the mentally disabled and learning disabled youngsters in a cross-categorical group will derive as much benefit from social skills classes as their behaviorally disordered peers.

If, however, the priorities for MD or LD youngsters are such that their academic needs demand all their special class time, the training needs of those whose primary disability is BD can still be met individually. An advantage to this arrangement is that the social skills selected for work can be precisely those in which the student has demonstrated deficits. Peer modeling and practice can be engineered by recruiting socially competent students from the mainstream. Peterson, et al. (1977) learned that preschoolers, both those with and without mental handicaps, were most likely to imitate the social behaviors of higher prestige, nonhandicapped youngsters, so the use of mainstream peers may be particularly effective. The teacher can help a student practice a difficult social situation in an individualized session, teaching him phrases to use to coach himself through specific situations as they arise. Then a situation can be arranged in which he will coach himself through the real thing. Using this technique, Oden and Asher (1977) trained a group of third and fourth grade students to improve their play skills, and a year later, their sociometric ratings of acceptance still showed the increases that had been gained immediately after the training. Important benefits of this arrangement also accrue to the "models," the youngsters drawn from mainstream classes, who not only sharpen their own awareness of prosocial skills but also expand their range of understanding and friendships.

There are few studies directly comparing the efficacy of group versus individualized social skill training. The potential for social interactions, both real simulated, that is inherent in a group is strongly in that format's favor, and it is an efficient use of teacher time. However, where no group is practical to assemble, or when an unusual child does not derive benefit from one, much can be gained from individualized programming. In a brief one-to-one session, skill steps can be presented on a file card and modeled by the teacher. The student may affix the card to his or her desk top or inconspicuously carry it in a pocket. A contract or check mark reward system can be agreed upon to monitor the use of the skill. The teacher may prompt the student when a natural situation is arising where the skill can be used. A skill folder or file may be developed for use in individual conferences and for homework assignments. Stephens' book Social Skills in the Classroom (1978) is an excellent resource for individualized training plans.

"How can I see if students are making progress?"

Assessment of social skill performance spans many levels from making specific observations during lessons (diagnostic teaching) to comparing the results of the surveys that were completed by teachers, parents, and students to identify priority skills at the start of a program to those made at a later date.

Besides their usefulness in initial assessment, skill checklists can be fashioned into criterion-reference sheets were student performance can be recorded. Participation in role plays, homework completion, direct observation, and self-reports of skill use can be recorded in individual skill booklets. Students, teachers, and parents may also complete a rating on the skills presented during a grading period as a posttest measure. Some students take social skills training classes most seriously when it is a class for which they receive grades and credit. The chance to earn an A in "social studies" can be a powerful motivator for work and involvement, and grades can be used as indicators of how successfully goals were met.

Structured observation of the social skills class on a regular basis provides a perspective on the productiveness of the group itself. Over time, increased attentiveness and more positive interactions are encouraging. Recording decreases in teacher-talk versus student-talk will show an upward trend in student involvement through questioning, discussing, and decision-making with a gradual lessening of teacher directiveness.

Recognizing that social skills training is but one part of special education programming, its effectiveness will likely be reflected by fewer disciplinary actions by building administrators or supervisors, fewer visits to the principal's office or "sit outs" in the lunchroom or playground. Increased participation in regular classes and school activities is a highly desired outcome. The teacher who analyzes these mainstream issues in terms of the social skills that are required to master them will plan lessons to reach those goals and be able to relate outcomes in the school environment to what has been taught in social skills class.

"Will this really work?"

Assume that students are self-centered. They are; they should be at their levels of cognitive and social development. Show them that learning a social skill will improve their lives, help them get what they want and need with fewer hassles. That's true, and the fact that others are happier, too, will become more and more valuable to them once they feel safer and more competent themselves.

Don't try to convince students that they want to learn what you want to teach. Just dive in and teach it with great good humor. Be excited because you've got something terrific to share that will make their lives better. Striving for their acknowledgement that they're messing up their lives and need to change starts everything on a sour note.

Use less talk, more practice! Don't get trapped into a valuesclarification lesson. Don't share your wealth of experiences no matter how a propos, and don't let the students do it either. Set a one-talltale-a-day quota. Modeling, role playing, feedback, and reinforcement build behavior skills—talk just spawns more talk and little action.

Resist the temptation to try solving each child's most pressing problem each day or you will end up with gripe sessions and lose sight of your goals for the group. Keep lessons focused and upbeat. Leaving some unfinished business is a good reason to start again the next day or to assign personalized homework.

Never allow an acting-out student to act out his aggressiveness in a role play. He'll get far more reinforcement from the aggressive playacting than he will from any alternative you might hope to teach, and so will his peers. You yourself should take the part of the teaser, or of the bully, or of the student

who flaunts authority or you can enlist the help of another adult.

Work with reluctant role players alone to rehearse or video tape role plays to be presented to the group the next day. This early ice breaker averts a pattern of resistance and struggle.

Be sensitive to family rules about what children should or should not do. Training a young person to be more assertive may be viewed as insolence with harsh consequences. Inform parents and seek feedback about program content. Help students find the best alternatives for themselves within their own worlds.

Practice what you teach! Use your best social skills—smile often, call students by name (first is best), ask what they think, show listening. When you forget to do so, catch yourself, think aloud about what you should do instead, and do it. Model the behaviors you want, but be a coping model—show how you, too, have to work at being perfect.

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APPENDIX A

TEACHING SOCIAL SKILLS TO BEHAVIORALLY DISORDERED YOUTH*

by ELLEN McGINNIS

Portions of this chapter are based on the work of McGinnis, E. and Sauerbry, L. "A Modified Approach to Skillstreaming" (unpublished paper), 1981; and McGinnis, E., Sauerbry, L. and Nichols, P. "Teaching Social Skills: A "Skillstreaming" Plan for Elementary-Age Behaviorally Disordered Children." Teaching Exceptional Children, 1985.

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A new philosophy is beginning to take hold in the field of behavioral disorders. Educators are recognizing that teaching academic competencies and enforcing external limits on a student's behavior are not enough to provide for successful reintegration into the mainstream school environment. Furthermore, these traditional methods alone are not enough to prepare behaviorally disordered students with the skills they need to cope with the social and behavioral demands of the world outside the school setting.

Traditionally, special classrooms for behaviorally disordered youth have placed an emphasis on informing the student that certain behaviors will not be tolerated in the school setting. This is achieved by implementing planned consequences for inappropriate ways of dealing with stress and conflict situations. While this is a vital role of the special classroom, it must not be the end of the behavioral intervention. Additional measures must be taken to provided students not only with the knowledge of what not to do, but also with the knowledge of what to do.

An important assumption made in this philosophy is that students do not make a conscious choice to misbehave or to deal with a problem in a socially unacceptable manner. The belief is that the majority of behaviorally disordered youngsters have not learned the necessary prosocial behavior. Learning, in this sense, means that the student is actually able to act in a prosocial manner when the situation calls for the behavior.

Many times, students can verbalize a variety of prosocial alternatives. For example, when Tricia reacts with physical aggression when tormented by a peer, it is likely that she will be able to state ways she could have dealt with this in a nondestructive way. However, when a similar situation occurs, even though Tricia "knows" what she should do (.e.g., ignore her tormentor), she just can't seem to react in this manner. The tendency on our part, then, is to make the assumption that Tricia has learned the prosocial skill and could have ignored her tormenter . . . if only she wanted to. Verbalizing prosocial alternatives, however, is very different from actually being able to carry out the action itself.

Why do some children learn acceptable social behavior while others do not? An empirical answer to this question is not known. However, the following factors may contribute to our understanding.

Cox and Gunn (1980) point out three reasons individuals fail to respond appropriately to social situations. First, a student may not have the knowledge of the desirable behavior with a given context. Such a student, for instance, may not have attended to the modeling of the desirable behavior, or may not have had appropriate models available. On the other hand, a student may have attended to an appropriated model, but was unable to interpret the behavior in the context of the situation. This can be referred to as a lack of behavioral flexibility, or the inability to adjust one's behavior to a variety of different situations, people or settings. For example, a student may request help from a peer in a socially acceptable manner. However, the student must also learn when it is acceptable to request this assistance (i.e., it may be appropriate during independent seat work, but unacceptable during a test or a class discussion).

A second explanation offered by Cox and Gunn is that the student lacks practice of the prosocial behavior. A common example of this is a child who is aware that "thank you" is a polite thing to say when someone does a favor for him or her; however, the child is not in the habit of responding in this way. In this case, the student has not practiced the skill to the point that it has become a part of his or her behavioral repertoire.

A third explanation provided by Cox and Gunn of why a student does not perform in socially acceptable ways is that the individual's emotional responses inhibit the performance of the behaviors. Anxiety, fear, anger or defensiveness may prevent the student from thinking and responding beyond that initial emotion.

Still another factor to consider is that students may be reinforced for the undesirable behavior and not adequately reinforced for that which is prosocial. Too frequently the inappropriate behavior is the one that receives reinforcement from both peers and adults. For instance, a young child may get attention much more quickly by whining than by quietly expressing his or her wants. Likewise, it may be easy for a teacher to inadvertently ignore a young student's request for help; but who can ignore a full-blown temper tantrum?

Research indicates that social skills deficits in children are related to school maladjustment (Gronlund & Anderson, 1963), delinquency (Roff, Sells & Golden, 1972), and peer rejection (Quary, 1978). Children with poor interpersonal skills, when compared to their socially competent peers, have also been found at high risk for adjustment problems in adulthood (Cowen, Pederson, Babigian, Izzo & Trost, 1973).

Recent studies suggest that social skills training with behaviorally disordered students does increase their prosocial responding (LaNunziata, Hill & Drause, 1981; Warrenfeltz, Kelly, Salzberg, Beegle, Levy, Adams and Crouse, 1981). Instruction in this area has increased peer acceptance of socially isolated children (Oden & Asher, 1977). Furthermore, instruction in interpersonal or social skills for behaviorally

disordered youth is implied in the Public Law 94-142 definition of serious emotional disturbance (1975) and is suggested as a way of facilitating successful mainstreaming of handicapped children (Gresham, 1982).

The intervention described in this chapter provides elementary and secondary teachers with a planned, direct and systematic way of teaching prosocial behaviors to behaviorally disordered students. This approach considers various explanations of why children fail to learn acceptable social skills, and assumes that students may be able to verbalize prosocial choices but are unable to act on these choices. It also assumes that constructive, socially acceptable ways of dealing with problems can result from direct and systematic teaching.[1]

Selecting the Skills

Selecting skills that are important to other persons in the student's environment will assist in others' acceptance of the target student. Several studies indicate that behaviors such as smiling at the teacher, task completion, following directions, volunteering answers, and complying with requests correlate with academic success. In general, children exhibiting these prosocial behaviors receive the most positive attention from teachers (Cartledge & Milburn, 1980; Gresham, 1982). Literature also suggests that the following skills increase a student's acceptance by peers: smiling, greeting others, joining in a peer activity, physical appearance, complimenting others, sharing and cooperating, making invitations to others and carrying on a conversation (Mesibov & LaGreca, 1981).

It is also important to discuss areas of need with the child's parents. Skills that benefit the child in the school setting may, in fact, be contradictory to expectations in the child's home and neighborhood environments. For example, a young child who attempts to discuss a problem with an out-of-control parent or older child in the home or neighborhood, may be better off to physically leave the situation than to attempt a constructive outcome at that time. Parental information is, therefore, necessary to ensure that appropriate emphasis is placed on the environments where a particular skill can be most useful.

Instruction in skills valued by the child's parents, teachers and peers also increases the likelihood that positive reinforcement will be given to the student in the natural environment. This reinforcement may help maintain use of the skill following the actual teaching (Stokes & Baer, 1977).

Although competence in the above social skills may serve to meet the social expectations of others, the primary goal of social skills instruction is to meet the personal development needs of students themselves (Rathjen, 1980). Once familiar with structured learning and specific examples of social skills, most students will share problems they are experiencing. Teaching students skills that provide a positive alternative for dealing with their immediate needs will increase their desire to master a given skill. Direct student input through a checklist or interview can provide information about the skills they feel are most useful.

Social skills checklists provide a way to identify a student's specific needs. They are also a method of recording social difficulties observed by the teacher. Such a checklist can be modified to gain information from the students themselves. Refer to Goldstein, Sprafkin, Gershaw, & Klein (1980) and McGinnis, Goldstein, Sprafkin, & Gershaw (1984) for examples of these checklists.

DEVELOPING AN INSTRUCTIONAL PLAN

Following the selection of the students and defining each student's skill needs, the student's name and rating on each skill is entered on the Skills Grouping Chart (Figure 1). This procedure records the needs of individual students, and guides the teacher in selecting skills for instruction. Students who receive low ratings on similar skills should be grouped together for instruction.

For use in the special classroom, the Skills Grouping Chart gives a profile of the class as a whole. Skills for instruction are selected according to the needs of the majority of the students. Students who appear proficient in the skill selected for instruction can assist in modeling displays and act as helpers for the rest of the group (i.e., providing suggestions for improvement on skill performance or a a co-actor) (Goldstein, et al., 1980).

Time for Instruction

Students should be instructed in social skills for 20 to 30 minutes at the elementary level, and from 30 to 45 minutes at the secondary level, at least three times per week. It is suggested that the remaining two days be set aside for work on related skills such as relaxation training, communication skills and

[1]Assessment of a youngster's social skills is described in the Iowa Assessment Model in Behavoral Disorders.

Elementary Social Skills Group Chart

Student's Name									
Group I: Introductory Social Skills									
Listening									
Asking for Help									
Saying Thank You									
Beginning a Conversation									
Asking a Question									
Asking a Favor									
Following Instructions									
Joining In									
Giving a Compliment									
Accepting a Compliment									
Group II: Dealing with Feelings									
Apologizing									
Knowing Own Feelings									
Expressing Own Feelings									
Recognizing/Understanding Own Feelings									
Dealing with Anger									
Dealing with Other's Anger									
Expressing Affection									
Dealing with Fear									
Group III: Alternatives to Aggression									
Asking Permission									
Sharing									
Helping Others									
Using Self Control									
Responding to Teasing									
Avoiding Trouble									
Staying Out of Fights									
Group IV: Dealing with Stress									
Making a Complaint									
Answering a Complaint									
Dealing with Losing									
Showing Sportsmanship									
Dealing with Being Left Out									
Dealing with Embarrassment									
Responding to Persuasion									
Reacting to Failure									
Dealing with Accusations									
Dealing with Group Pressure									
Deciding on Something to Do									

Figure 1

identifying feelings. At the end of each school day, an additional 10 minutes should allow students to chart the skills they have practiced that day (daily Self-Report Chart).

Establishing Group Rules

Specific behavioral rules should be decided on before actually implementing the social skills teaching session. Rules may include: wait until another person has finished talking before you begin to speak; remember to leave toys and other objects at your desk; etc. Four or five rules are a workable number to begin with.

Rules like these are needed in early stages of group work and can prevent many behavioral difficulties. Allowing the group to establish these rules, with teacher guidance, encourages the students' commitment to abide by these rules. Students should also be reinforced for following the rules during the teaching sessions.

Introducing Skills

A new skill, if it is one of the less complicated ones such as "listening" or "how to ask a question," can be introduced every week or two. However, as overlearning is of critical importance with this technique (Goldstein, et al., 1980), a new skill should be introduced only when the students can recall the steps of the past skill and have shown generalization outside the group teaching setting. When more complicated skills are introduced, three weeks or longer can be spent on one skill. Periodic review will reinforce previously learned skills and encourage their use in new situations, provide systematic fading of the training for generalization (Buckley & Walker, 1978), and prevent student boredom from concentration on only one skill at a time.

Level of Instructional Support

Children may fail to learn appropriate social behaviors for a variety of reasons. Structured learning is appropriate no matter why the child has not learned these behaviors. The value of social skills teaching is enhanced, however, when additional emphasis can be placed on specific areas of need. For example, focus for one child may be on providing meaningful reinforcement for skill performance. Another child may need to be told when to use the skill, and then be reinforced for the behavior. Still another youngster may need to be prompted through each skill step before the behavior can be learned. Figure 2 suggests questions to be asked regarding the child's level of social behavior and subsequent interventions to be used in planning, reinforcing and modifying the social skills instruction for individual students.

Figure 2

Behavior Level Interventions

Questions	Interventions
1. Is the student exposed to appropriate models?	Provide appropriate modeling.
2. Does the student observe and imitate the prosocial behaviors being modeled?	Point out to the student the specific behaviors being modeled.
3. Does the child adjust his/her behavior in response to different people? situations/settings?	Call attention to what behavior is appropriate for given situations and with different persons (behavioral flexibility).
4. If the student behaves inappropriately, can he/she behave in a prosocial way when requested?	Remind the student to use a given skill.
5. If the student can react in a prosocial way when requested, does his/her feelings.	Train impulse control. Emphasize skills that deal with response inhibit his performance?
6. Does the student receive rewards from peers and adults for the undesirable behavior? the desirable behavior?	Provide reinforcement for prosocial behavior. Implement contingency contracting.

THE STRUCTURED LEARNING APPROACH

Structured learning is a behavioral approach to teaching prosocial skills (Goldstein, et al., 1980). This method provides students with specific behavioral steps to guide their performance of a social skill. The steps are learned to a mastery level with actual examples for illustration (modeling). Structured learning also provides practice with the skills in simulated problem situations (role playing); information as to how well the skill was performed (feedback); and practice in real life situations (transfer of training).

Skills and Skill Steps: Many social skills chosen for instruction are those believed to be related to a child's social competence (Spivak & Shure, 1974); those suggested by the research as related to peer acceptance (Mesibov & LaGreca, 1981), positive teacher attention and academic success (Cartledge & Milburn, 1980); and those likely to provide reinforcement in the student's natural environment.

Key social skills, such as "how to deal with wanting something that isn't mine," are task analyzed into a sequence. These steps will guide the student's performance of the social skill. For example:

When I Want Something That Isn't Mine

1. Say to yourself, "I want this, but I can't just take it."
2. Say, "It belongs to _____"
3. Think of your choice:
   a. I could ask the person to loan (or share) it.
   b. I could earn the money to buy it.
   c. I could ask the person to trade.
4. Act out your best choice.

Other examples of this type of skill can be found in Goldstean's Skillstreaming the Adolescent (1980) and Stephens' Social Skills in the Classroom (1978).

The first step of many of the skills, specifically those that deal with alternatives to aggression, must present an impulse control strategy. Before a student can break his or her well-established pattern of response and learn the prosocial alternative, the student's initial reaction to the conflict situation must be stopped. Therefore, the student needs to learn strategies such as counting to 10 or taking three deep breaths when the problem first arises. This gives the student time to recall the remainder of the steps to the prosocial skill.

Although these behavioral steps are displayed for students on a chart of skill card (a card that lists the steps), it is important that they memorize the steps. The structured learning components will facilitate this memorization by pointing out the steps as they are modeled, verbalizing each step as it is performed in the role playing setting, giving feedback as to how well the skill was performed, and listing the skill steps on specific homework assignments.

MERELY BEING EXPOSED TO A MODEL IS NOT ENOUGH. THE STUDENT MUST ALSO ATTEND TO THE BEHAVIORS MODELED, REMEMBER THEM AND REPRODUCE THEM.

Modeling

Modeling, or imitating a behavior, has been an effective method of learning for children and adolescents (Bandura, Ross & Ross, 1961; Rogers-Warren & Baer, 1976; & Rosenthal, 1976) Modeling is the first phrase of structured learning and demonstrates to the students what to do. Several conditions will enhance the effectiveness of modeling (Goldstein, et al., 1980).

Characteristics that enhances the model's effectiveness

- the model is highly skilled in the behavior
- the model is considered to be of a high status
- the model is friendly and helpful
- the model is of the same age, sex and social status
- the model is rewarded for the behavior

Characteristics of the modeling display

- presents clear and detailed behaviors
- presents the behaviors in order from least to most difficult
- provides enough repetition to facilitate overlearning
- presents little irrelevant detail
- provides several models, rather than a single model

Characteristics of the observer (target student)

- the student is instructed to imitate the model
- the student likes the model
- the student is similar in background to the model
- the student is rewarded for performing the behavior which was modeled

Modeling is also more effective when a coping model is presented as opposed to a mastery model (Bandura, 1977). For example, if the model's task is to demonstrate the skill of "how to handle teasing," it is more effective if the model "struggles" with walking away from his or her tormentor. Walking away slowly, with teeth clenched, will show that this is not an easy task to accomplish. Modeling verbal mediation, for instance, saying out loud "It's hard to walk away, but I can do it," further helps to demonstrate a coping model. This provides a more realistic modeling display than simply walking away void of any emotion or conflict.

Merely being exposed to a model is not sufficient for learning to take place. Many students have appropriate modeling available to them through nonspecial education classes, yet they do not learn the necessary prosocial behaviors. Thus, learning does not occur by mere exposure to modeling. The individual must also attend to the behaviors modeled, remember these behaviors, and reproduce them (Bandura, 1977).

With structured learning, the students must identify the specific behaviors (or skill steps) being modeled. This increases the chances that the student is actually paying attention to the modeling display. The students must also remember these behaviors. Repeating the steps as they are being modeled and practicing these behaviors in a role playing setting will assist the student's retention of the actions that are modeled.

However, learning via modeling requires not only the observer pay attention to the modeled actions and remember these behaviors, but that he or she actually reproduces the behaviors. Therefore, learning is not determined by whether or not the student can reproduce the behaviors, but rather by whether he or she does reproduce them (Goldstein, et al., 1980). This will be more likely to occur if the student is rewarded for the behavior (Bandura, 1977).

It is also important that the teacher, in the course of the school day, model appropriate social behavior. When the teacher becomes frustrated or angry with a student's behavior, it has a powerful effect if the teacher models the steps of "dealing with my own anger" in a clear and deliberate manner.

Role Playing

Studies carried out on role playing with children indicate that this strategy can create behavior changes in social skills (Rathjen, Hiniker & Rathjen, 1976; Ross, Ross & Evans, 1976). In addition, a student is far more likely to reproduce the behavior if he or she is an active, rather than passive, participant (Bricker, 1978). Factors that enhance the effectiveness of role playing include 1) allowing the student to choose whether or not to participate in the role playing; 2) the student's commitment to the behavior he or she is role playing (i.e., the skill is relevant to the student's needs); 3) ability to improvise the role playing; and 4) reinforcement given for performing the behaviors (Goldstein, et al., 1980).

Role playing is the second stage of structured learning, and it helps the student learn how to perform the skill. First, the student identifies a situation where the problem was experienced. Then the student chooses another role player, one who reminds him or her most of the person with whom he or she has the difficulty (Goldstein, et al., 1980). The role playing occurs in the context of the situation described by the main role player. Role playing the skill a number of times, with different people and in a variety of settings and situations, increases the likelihood that the student will use the skill outside the teaching setting (Stokes & Baer, 1977).

It is important that students practice verbal mediation during their role playing. Saying the steps aloud as they are performing the behaviors will facilitate students' learning of the social skill.

Verbal Mediation

Verbal mediation, or talking oneself through the performance of the skill, is a vital part of structured learning. When modeling the skill of "how to handle teasing," for example, the model recites the steps of the social skill in the context of a given situation. The model might say something like": "I believe I am being teased because they are looking at me and laughing. I don't like to be teased, but I won't let them know that! I'm angry, so first I have to cool down. I need to count to five. 1 . . . 2 . . . 3 . . . 4 . . . 5. Okay, now I think of my choices." etc. This narration increases the effectiveness of the modeling display (Bandura, 1977), may facilitate generalization of the skill (Stokes & Baer, 1977), as well as models the cognitive process one goes through in performing the skill.

Similarly, the child must talk himself or herself through the skill when role playing. Research suggests that verbal mediation in the role playing setting helps to restrain impulsively and assists the student's retention and organization of the behaviors (Meichenbaum & Goodman, 1971).

Performance Feedback

Approval or reinforcement is given by the teacher and peers as the role playing becomes increasingly like the behavior of the model (Goldstein, et al., 1980). If the role player does not follow the skill steps, feedback is given by discussing what could be done differently, reteaching, or prompting the student through the skill steps. The main role player should also evaluate his or her own performance.

The group participants also provide feedback to the main role player. However, this must be done in a positive or constructive manner. Suggestions for what the role player could do to become more successful, constructive reminders to include a specific skill step, and comments pertaining to the feelings of the role players are examples of acceptable feedback. Encouraging the group members to participate in feedback also focuses their attention on the role playing and helps prevent boredom and potential behavior problems. Students could also be assigned to watch for each step as it is performed.

Transfer of Training

Transfer of training is perhaps the most important part of structured learning. Several studies indicate that although structured learning is a successful strategy to create behavior change, these behaviors do not maintain over time, nor do they generalize outside the teaching setting, unless specific techniques are implemented to assist this transfer (Goldstein, 1981).

It is crucial, then, that this approach not become a "train . . . and hope" one (Stokes & Baer, 1977). Instead the teacher must plan for the generalization and maintenance of learned social skills. Following is a structured sequence of homework assignments for elementary age children that plans for the generalization and maintenance of social skills instruction. (Refer to Chapter 11 of this manual for an indepth discussion of generalization and maintenance.)

The assignments begin with the teacher and student together deciding when and how the student will practice, and progress to the stage where the students themselves record the skills they have used. Homework assignments are given to several students each day. Four stages of homework are used, depending on the level of the student's mastery of the skill.

Homework Stage 1: The students think of situations (either at home or school) in which they want to practice the skill. The student and teacher agree to the skill steps, who they will be tried with, and when the plans will be carried out.

Homework Stage 2 (Red Flag): The student will be told that he or she will be "set up." For example, if the skill is "how to ask a question," the student will be told, "During math this morning, I will give you work that you won't understand. I want you to remember the steps. They are on your homework sheet. Remember, I will be setting you up. It's a Red Flag!" (Hawkins, 1980). When the teacher has given the difficult assignment to the student and the student has reacted, the teacher calls "Red Flag." Then together they evaluate the child's response.

It's important that the student initially be given this type of preparation, as the goal is to successfully use the skill. As the student becomes ore familiar with this process, less advance notice should be given. This method is similar to Meichenbaum's Stress Innoculation Training (Cartledge & Milburn, 1980). The goal of this strategy is not only for the student to be able to perform the skill under nonstressful conditions, but under stress as well. Following successful performance with Homework Stage 2, the student should be ready to attempt use of the skill under real-life circumstances.

Homework Stage 3 (Self-Recording): The child who has almost achieved mastery level of a skill (knowing the steps well and showing success with the other two stages of homework) writes the steps onto the

self-recording sheet. Then, throughout the school day, the student writes when the steps of the skill were practiced and the self-evaluation portion is completed. The younger student can take the homework sheet into the regular classroom. This will assist in transferring learning to the setting to which the student will eventually return.

Homework Stage 4: Several skills are listed on a 3"x5" note card and the student tallies each time he or she practices the skill. This method of self-recording also gives the older student an inconspicuous way to chart skills used in regular education classes and settings such as the playground and school cafeteria. Specific examples of homework assignments for adolescents are given in Goldstein, Sprafkin, Gershaw and Klein (1980).

Self-Recording and Self-Evaluation

In addition to self-evaluation during role playing, the students evaluate their own performance in each stage of the homework assignments. Assignments are shared with the group, and reinforcement is given for completing homework assignments and evaluating his or her own performance. The self-evaluation is based on how well the student performed the steps of the skill, rather than how well the skill actually worked. Students must be made aware that the skill may not work in every situation; however, they still need reinforcement for using the skill steps.

Self-recording is also implemented by completing the Daily Self-Report Chart (Figure 3). Students record the skills they have practiced during the day. This provides a record of the skills the students are actually using and gives the teacher an indication of the specific skills not being used. The teacher will then know which skills need to be reviewed or taught again. As time permits, several students should be asked to cite the specific situations in which a skill was performed, and the students should receive verbal praise from the teacher for these self-reports. Peers should also be encouraged to reinforce the students citing the examples.

Daily Self-Report Chart

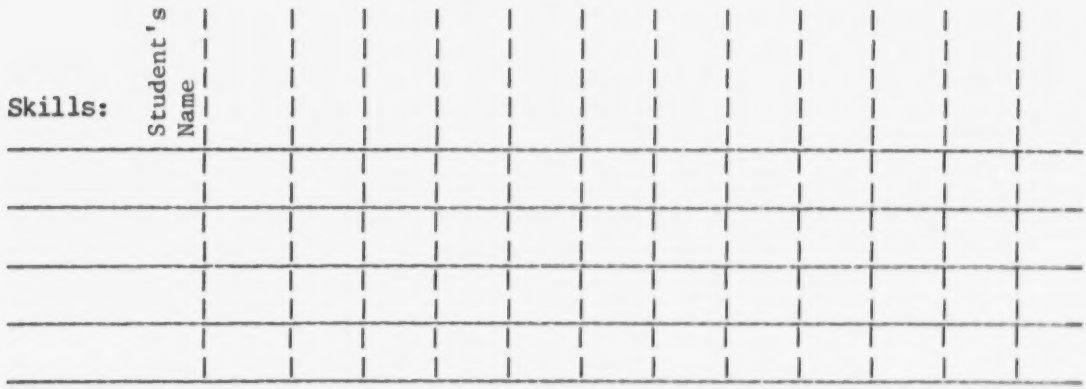

Figure 3

Other Generalization Strategies

Additional generalization principles need to be considered throughout the teaching process. The principles that enhance generalization and maintenance of learned behaviors are related to the instructional setting, materials and teaching personnel; systems of reinforcement; and task instruction.

Teaching Setting, Materials and Personnel

The principle of training implies that generalization is facilitated when the setting in which the training or teaching occurs closely resembles the natural setting where the skill will be used (Goldstein, 1981). Hence, when simulation is used in lieu of teaching in the natural environment, the physical setting should be as much like the natural setting as possible (Buckley & Walker, 1978). Using props and arranging the teaching environment to resemble the real environment where the skill will be performed enhances generalization.

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The actual use of a skill is facilitated by teaching the skill in a variety of settings and in response to a variety of persons (Stokes & Baer, 1977; Stokes, Baer & Jackson, 1974). This includes teaching social skills in several different school environments (cafeteria, classroom, library, etc.), and planning for skill use at home (in response to parents and siblings) or school (in response to other teachers and school personnel) and in the student's neighborhood environment.

An additional method to enhance generalization focuses on environmental changes that will support the child's new behaviors (walker, 1979). This involves instructing parents, peers and school personnel in strategies that reinforce the students when a given skill is performed.

Reinforcement Systems

Providing reinforcement when the student demonstrates the desired behavior (Stokes & Baer, 1977), then gradually thinning the reinforcement schedule (Koegel & Rincover, 1977) are other generalization and maintenance methods that have proven successful. Using reinforcement that occurs naturally in the environment, such as smiling and a pleasant thank you (initially this social reinforcement may need to be paired with a stronger reinforcer) will increase the chances that the student will be reinforced by others outside the teaching setting (Stokes & Baer, 1977).

Task Instruction

Overlearning, or learning to a mastery level (Goldstein, 1981) increases the likelihood that the skill will be used outside the teaching setting. Even though we feel a student has learned a skill in the classroom setting, it is necessary that the instruction be withdrawn systematically, rather than stopped abruptly (Buckley & Walker, 1978). Instructing the student to use the skill when a situation suggests its use (instructed generalization) facilitates continued performance and transfer of the skill (Stokes & Baer, 1977). Additionally, telling the child that he or she will be teaching the skill to others and using the student as a co-teacher (helper role structuring) will further enhance generalization (Goldstein, 1981). The following outline lists generalization and maintenance strategies incorporated into structured learning:

Instructional Setting, Materials and Personnel

1. Instruction in natural environments where the skill is actually needed (i.e., playground, hallways, school bus) (Walker, 1979).
2. Teaching in a setting similar to environments where the skill is to be used (Goldstein, 1981).
3. Using props to enhance the similarity of the teaching setting and the natural setting (Buckley & Walker, 1978; Goldstein, 1981).
4. Instruction in groups (Stokes & Baer, 1977; Stokes, Baer, & Jackson, 1974).
5. Training peers, teachers and parents to reinforce skill use (inservice training for school staff, information parents of target skills, and group instruction) (Stokes, Baer, & Jackson, 1974).
6. Teaching the skill in a variety of situations and settings (multiple role plays with different persons) (Stokes & Baer, 1977; Wahler, 1969).

Reinforcement

7. Providing reinforcement when the desired behavior occurs (Stokes & Baer, 1977).
8. Providing reinforcement on an intermittent or random schedule (Stokes & Baer, 1977).
9. Gradually decreasing the frequency of reinforcement for performance (Koegel & Rincover, 1977).
10. Allowing the students to determine their own reinforcement (Stokes & Baer, 1977).
11. Emphasis on skills relevant to the student's needs (skills the students will have the opportunity to use and be reinforced for).
12. Providing for natural reinforcement (reinforcement likely to occur in the natural environment) (Stokes & Baer, 1977) paired with other reinforcement as needed.

Skill Instruction

13. Overlearning the skill (practice several times in different sets of circumstances; multiple role plays;

homework assignments) (Goldstein, 1981).

14. Systematic withdrawal of instruction (using periodic review and reteaching of the skills; daily recording skill used) (Buckley & Walker, 1978).
15. Instructing the students to use the skill when conditions indicate its use (instructed generalization) (Stokes & Baer, 1977).
16. Allowing the student to teach the skill to others or to participate as a co-teacher (helper role structuring) (Goldstein, 1981).
17. Using verbal mediation (talking oneself through the skill during modeling and role playing) (Stokes & Baer, 1977).
18. Planning opportunities for students to practice the skills (Cartledge & Milburn, 1980).
19. Implementing self-recording procedures (daily recording of skills used; homework self-recording) (Stokes & Baer, 1977).
20. Implementing individual behavioral contracts for uses of a particular social skill (Stephens, 1978).

For generalization and maintenance to occur, it is further necessary to plan the classroom environment in ways that encourage students to use prosocial skills. Allowing the students to work in small groups and using cooperative learning activities (Johnson & Johnson, 1975) are examples of creating opportunities for students to practice the social skills they have learned.

Assessing Maintenance and Generalization

The assessment process is incomplete without determining that the student continues to use the skill following the teaching (maintenance) and demonstrates the skill in environments other than where the teaching occurred (generalization). A review of studies by Rotherman (1980) indicates that changes in social behavior following instruction do not continue beyond a few weeks after intervention ceases. Additionally, skills taught do not automatically generalize to other environments (Stokes & Baer, 1977).

When a skill is "learned" in a given situation or setting, the only thing we can be fairly certain of is that the student can perform that skill in that setting under those specific teaching conditions. We cannot assume that the student will actually be able to use the skills outside the teaching setting.

Walker (1979) views changes in behavior as a two-stage process. Stage one consists of strategies to change the behavior (i.e., social skills instruction). Stage two consists of a second set of strategies to ensure that the learned behavior is applied over time, under a variety of conditions and in other environments. Our teaching must not overlook this second, critical aspect of social skills instruction. Teaching is only effective if the students actually use these skills.

Several strategies can be used to assess whether or not a student's performance maintains over time and generalizes to other situations and settings. These include: (1) documentation of performance on homework assignments; (2)teacher recording of observed social skills overtime and in various settings; (3) successful completion of contingency contracts for use of a given skill (Stephens, 1978); and (4) implementing students self-recording procedures. (Refer to the section on transfer of training.)

Summary

The program focuses on a behavioral intervention design (structured learning), and specific strategies for maintenance and generalization of learned social skills. While much of the instructional program is designed to take place during a specific "group time," structured learning is most effective when it is also integrated into the teacher's behavior management system.

When potential problems arise in the classroom (the teachable moment), the teacher can elicit a prosocial response from the student by suggesting that the skill steps be used, rather than reprimanding the student for having the problem. It may also be necessary to prompt a student through the behavioral steps for the social skill needed, and then give approval when the steps are taken. Each time this happens, the teacher is reminding the students what to do rather than what not to do. This turns problem situations into learning opportunities for behaviorally disordered students. Furthermore, it provides an environment where a positive emphasis is placed on learning how to deal with problems that contribute to their handicap.

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Appendix B *

Annotated Bibliography of Social Skills Curricula

(1) Simulation Materials

a. Goldstein, A. P.; Sprafkin, R. P.; Gershaw, N. J.; and Klein, P. *Skillstreaming the adolescent*. Champaign, Illinois: Research Press, 1980.
Target population. This program was developed for adolescents, and can be utilized with intermediate level elementary students.
Description of materials. The text provides the educator with 50 lesson plans for 50 social skills, two different homework report forms and instructions for implementing the program.
Format. The teacher selects one of the 50 skills to be taught. Each lesson follows the same format: (1) define and discuss the skill to be learned, (2) distribute skill cards containing the steps for the skill, (3) model appropriate use of the skill, (4) organize role-plays during which students practice the skill, (5) give and invite feedback, (6) provide social reinforcement, and (7) assist students in planning homework assignments.

b. Hazel, J. S., Schumaker, J. B.; Sherman, J. A.; and Sheldon-Wildgen, J. *Asset: A social skills Program for adolescents*. Champaign, Illinois: Research Press, 1982.
Target population. Designed for adolescents grades six through 12, this program functions best when used with groups of five to eight members.
Description of materials. The Asset manual provides the leader with training procedures, nine lesson plans, skill sheets outlining the steps for each skill, home notes, checklists, consent forms and various questionnaires. The program includes nine video taped sequences modeling appropriate and inappropriate social interaction skills. The leader is encouraged to utilize appropriate props for role-plays.
Format. Each session follows the same format: (1) review of home notes, (2) review of previously learned skills, (3) presentation and discussion of positive and negative examples of the target skill on video tape, (4) distribution and examination of skill sheets containing the steps in the target skill, (5) verbal rehearsal, (6) role-play or behavioral rehearsal, (7) feedback, (8) criterion role-plays and (9) home notes assigned.

c. *MARC: Model affective resource curriculum*. Orlando, Florida: Orange County Public Schools.
Target population. This program is designed for adolescents.
Description of materials. The manual provides the teacher with lessons for skills in four areas: self-control, interpersonal problem solving, communications and behavioral interactions.
Format. Each lesson teaches a specific skill or component of a skill. The leader (1) facilitates discussion, (2) models appropriate behavior, (3) assists students in practicing the skill through role-plays, (4) provides feedback, (5) summarizes the lesson and (6) gives a practice assignment. Several lessons involve practicing the skills in natural environments, as well as simulation.

d. Stephens, T. M. *Social skills in the classroom*. Columbus, Ohio: Cedars Press, Inc., 1978.
Target population. This program can be used with student groups of all ages.
Description of materials. The manual provides the educator with instruction in a variety of directive teaching techniques: social modeling, social reinforcement and contingency management. The manual also provides three lesson plans (one for each teaching technique) for each of the 136 skills. The teacher selects the skill to be taught and the teaching technique most applicable to the student's needs.
Format. When teaching a new skill, the educator uses the social modeling strategy: (1) set the stage through discussion, a story, a film, etc., indicating the value of learning the skill, (2) draw out of discussion the specific steps which make up the skill, (3) model correct behavior, (4) set up role-plays in which the students practice correct behavior, and (5) plan and implement reinforcement strategies for the skill throughout the day. The teacher may use social reinforcement or contingency management techniques if needed to continue to maintain the skill once learned.

e. Walker, H. M.; McConnell, S., Holmes; D., Todis, B.; Walker, J.; and Golden, N. *The Walker social skills curriculum: The accepts program*. Austin, Texas: Services for Professional Educators, 1983.
Target population. This program is designed for students at the elementary level, grades one through six.
Description of materials. The manual provides the teacher with guidelines for teaching the curriculum, teaching scripts for 28 skills, and behavior management procedures.
Format. The leader facilitates (1) definition and guided discussion, (2) modeling of positive example, (3) modeling of negative example, (4) role-plays for practice, (5) criterion role-plays to determine if concept was learned and (6) informal contracting. All examples for each skill are available on video tape.

(2) Supplementary activities

a. Ball, G. *Interchange*. San Diego, California: Human Development Training Institute, 1977.
Target population. Separate kits are available for junior high and senior high students.
Description of materials. Each kit is packaged in a storage box for easy access to leader's manual and cards for discussion sessions. The discussion topic cards are organized into approximately 40 units, each with six to 10 discussion lessons outlined.
Format. The leader facilitates a supportive, open-ended style discussion session which focuses on one of the discussion topics.

b. Elardo, P.; and Cooper, M. *Aware: Activities for social development*. Menlo Park, California: Addison-Wesley Publishing Co., 1977.
Target population. This program is designed for elementary aged students.
Description of materials. The handbook provides the teacher with techniques for conducting successful lessons, and sufficient discussion topics, enrichment ideas, games and role-plays to last an entire year.
Format. The leader's objectives are to encourage active participation, lead discussions with enthusiasm, encourage students to expand ideas, ask questions, etc. The teacher utilizes the discussion themes in other parts of the curriculum by using enrichment ideas provided in the handbook during reading, math, social studies, etc.

c. Hoagland, C.; Eyler, S.; and Vacha, E. F. *Classroom learning to attain social skills*. Orcutt, California: Orcutt Union School District, 1981.
Target population. These activities are best suited for primary aged students, grades kindergarten through three.
Description of materials. The handbook provides the educator with an overview description of how to implement supplementary social interaction strategies. Reproducible pages make preparing for activities such as games, graphing and puppetry easy. Detailed descriptions of music, art, movement and group cooperative activities are presented.
Format. The educator uses the handbook lesson plans to provide a wide variety of reinforcing, fun activities designed to encourage positive growth in the general areas of friendship, communication and cooperation.

d. Palomares, U.; and Logan, B. *A curriculum on conflict management*. San Diego, California: Human Development Training Institute, 1975.
Target population. Discussion and activity lessons are designed for elementary aged students, grades one through six. Many could be used with adolescents grades seven through nine as well.
Description of materials. The small handbook provides information about conflict and conflict resolution, discussion topics for conflict management sessions, and descriptions for activities to reinforce learning in the area of conflict management. Activities include creative writing, skits, art, sensory perception, verbal and nonverbal communication, comic strips, puppets and many others.
Format. When presenting topics for discussion, the teacher's objectives are to encourage individual expression, accept every viewpoint, model good listening and keep the discussion open-ended. When presenting experiential activities, the educator concludes the activity with open-ended questions in order to encourage students to express their feelings and share what they have learned.

e. *Project Transition*. Seattle, Washington: Seattle Public Schools, Department of Student Services, 1981.
Target population. This comprehensive program is designed for use by counselors at the senior high level. Use by classroom teachers is encouraged as well.
Description of materials. The materials are organized into six booklets, each one a separate unit. The six content areas are introduction, communication, self-assessment, goal setting/decision-making, career exploration and long-range planning.
Format. The leader follows the manual for each discussion session or activity lesson. Activities include paper-pencil tasks, group tasks, art, etc. Discussion following the activity is directed by the leader.

f. *Putting it Together*. Seattle, Washington: Seattle Public Schools, Department of Student Services, 1978.
Target population. These lessons are designed for elementary aged students, but many could be adapted to secondary grade levels.
Description of materials. The handbook provides descriptions for activities grouped into five general areas: transition and orientation to a new school, classroom climate, self awareness, conflict resolution and career awareness. This handbook is actually a compilation of supplementary activities from other authors. Activities include games, creative writing, brainstorming, discussion, questioning, awards, graphing, stories, journal, vocabulary building and many more.
Format. No specific information is given regarding leader behaviors or instructional techniques. The teacher simply uses the lesson plans in any manner that works well in the ongoing curriculum.

g. Vacha, E. F., McDonald, W. A.; Coburn, J. M.; and Black, H. E. *Improving classroom social climate*. New York: Holt, Rinehart and Winston, 1977.
Target population. These activity lessons are best suited for students in grades four through six.
Description of materials. The text provides information regarding the implementation of a classroom climate program and how to best utilize the book. Teacher's guides and lesson plans are divided into six general areas: attraction, communication, leadership, norms, expectations and cohesion. Activities includes games, puzzles, art, mazes, cooperative tasks, discussion, stories, worksheets, interviews and more.
Format. The goal of the educator is simply to implement lessons from each of the five topic areas throughout the school year in order to provide students an opportunity to interact with one another on a regular basis, and discover together ways to improve social interaction skills.

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Chapter 7

AFFECTIVE/EMOTIONAL GROWTH: A LOOK AT PSYCHOEDUCATIONAL INTERVENTIONS

Doug Fairchild
Teacher, Behavioral Disorders
Area Education Agency 7
Cedar Falls, Iowa

(Special appreciation to Rick Jennings who contributed significantly to the Introduction of this chapter.)

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Chapter 7

AFFECTIVE/EMOTIONAL GROWTH: A LOOK AT PSYCHOEDUCATIONAL INTERVENTIONS

Doug Fairchild

INTRODUCTION

Essential to any classroom for behavior disordered students is the daily instruction in affective education. Affective education, in general terms, concerns the emotional development of the child in areas of attitudes, values, and feelings (Morse, Ardizzone, MacDonald, & Pasick, 1980). Using affective approaches, teachers help children to improve their skills in the areas of interpersonal problem solving, self-control, adult/peer interaction and communication skills. The goal of implementing affective approaches is the development of these interpersonal skills so that the student may reach his/her fullest potential within educational and community settings.

The approaches and materials in affective education have their roots in both education and psychology. The field of education provides concepts such as homework, role playing, structured discussion, simulation, and practice. From the field of psychology we have applied the principles of social learning, including transfer of training, modeling, behavioral rehearsal and feedback. With the affective model the therapist is a teacher rather than a physician, and the students' problems are thought of as learning deficits or maladaptive overlays, rather as "symptoms." Affective education presented in whatever mode — Rational Emotive Education, Transactional Analysis, Moral Education, Arts Therapy, Video Therapy, or Social Skills Training (Chapter 6) — is intended to help children learn new thoughts, feelings and behaviors which in turn help them lead richer and more satisfying lives.

Setting Up an Affective Group

Most affective curriculum requires group instruction. When the word **"group"** is mentioned an immediate thought may be that "group" is therapy and therapy is for therapists, psychologists or counselors. Although there are skills critical to being an effective group leader, these skills are easily learned by the teacher. As explained by Goldstein (1981), "The task of the skills trainer becomes, therefore, not interpretation, reflection, or reinforcement but active and deliberate teaching of desirable behaviors" (p. 1).

As with any teaching lesson or objective, instructing the affective group is a preplanned, structured process. Guidelines for setting up an affective group are as follows: (This material is adapted from Secondary Levels Curriculum Handbook: Program for Emotionally Handicapped Students. The School Board of Pinellas County. Clearwater, Florida, 1985.)

1. Scheduling. Decide on the time of day that is best to work an affective group into the routine of the day. Length can be anywhere from 30-50 minutes (shorter periods of time for younger children).
2. Seating arrangement. Adapt the physical arrangement to meet the needs of students. Hopefully, students will be able to tolerate a circle or half-wide arrangement.
3. Rules. Establish rules and consequences for breaking rules before the first lesson. The rules should be visably displayed and so as to be easily referred to. The teacher reviews the rules with students at the first group meeting. One of the most important guidelines for group behavior and participation is that everyone feel secure enough to openly voice their thoughts. Here are examples of rules that could be used in a group session:
   a. It is okay to disagree.
   b. It is not okay to disagree by putting others down, talking off subject and not allowing those who disagree with you to participate.
   c. One person talks at a time.
   d. Everyone gets a turn.
   e. Active listening is expected.
   f. There are no right or wrong answers, as long as what is said relates to the topic.
   g. Keep hands, objects to self.
   h. Students have the right to pass (not participate).
   i. What is said in group stays in group.
4. Assess individual students needs. This is an ongoing process and is vital to meeting IEP goals and

objectives (Refer to Chapter 2, Assessment).

5. Select materials. A large variety of materials are available which this chapter addresses.
6. Writing of goals and objectives of group. Define precisely what you want to accomplish and how you plan to reach your goal.
7. Implementation of lesson. Begin by informing students what you (teacher) are trying to accomplish in group. Students often demonstrate greater interest if they know intention of the teacher. Refer to pp. 160-166 of Teaching Disturbed and Disturbing Students: An Integrative Approach, by P. Zionts, 1985 to gain understanding of how to initiate group discussions, how to ask questions and how to prevent problems.
8. Evaluation of goals and objectives. Simply evaluate if student and group goals were met during group discussion. Record results on IEP.

Interventions

The affective curriculum reviewed in this chapter is by no means an exhaustive one. The intent is to give BD teachers an opportunity to examine several approaches that can be used to help children of all ages develop an awareness and understanding of themselves in relation to others. The affective programs chosen for this chapter are Rational Emotive Education (REE), Transactional Analysis (TA), Video Therapy (VT), Bibliotherapy, and Moral Education.

REE and TA will be reviewed with the idea of giving teachers "hands-on" experience. The other approaches will be reviewed briefly with references as to where a more in-depth description and analysis may be obtained.

Video Therapy (VT) - Bibliotherapy

Video therapy and bibliotherapy are reviewed first because these approaches are extremely easy to include with other curriculum components of affective education. As the reader examines the sections on REE, TA, and VC, much video therapy and bibliotherapy is included as an intricate part of the curricula.

VT and bibliotherapy are quite similar in their approach except for the medium used. VT and bibliotherapy are exactly what their names imply — therapy through watching video presentations and reading books. The research on modeling using film or videotape to facilitate behavioral change in school age children and adolescents supports the use of VT (Perry & Furukawa, 1980). To help with reintegration, BD students need to make substantial changes in their behavior. Using a medium to which youngsters choose to expose themselves in their leisure (video), and to which educational and psychological research has shown to be effective, may help to create significant change. Appendix A gives a small sampling of the many types of films to choose from that could be beneficial.

Bibliotherapy has been defined as "a dynamic interactive process between reader personality and literature which effects adjustment and growth" (Morgan, 1976, p. 39). Books have been written for children to help children cope with feelings and disabilities (see Fossler, 1978). Dreyer (1977) describes a number of children's books that deal with childhood problems and concerns.

A major part of VT and bibliotherapy is the amount of interaction they can generate for group discussion (Fairchild, 1984). They give the students "something to do," action to be taken, something they can "get a hold of;" rather than merely something to "talk about." Also, both therapies are easily paired with other affective approaches which increases the effectiveness of both approaches (Fairchild, 1984).

As in choosing any other affective approach, the teacher must consider such things as the child's developmental level, preferred sensory mode, interests, hobbies, and so on. Obviously, children with reading difficulties would be less likely to gain therapeutic benefits from a book. Children with poor abstract reasoning abilities or highly egocentric point of view would have difficulty applying what they see from films and read from books to their own lives (Shapiro, 1984). Age appropriateness and developmental level of the content of books and films are important considerations when selecting material.

In the following sections on REE, TA and VC, many references are made to the idea of using selected video presentations. This means the teacher should preview affective, growth oriented films, Instructional Television programming, Afterschool Specials (ABC) and Afterschool Breaks (CBS), and choose specific parts of the video presentation that will help him teach to the objective outlined for group discussion. For further insight on how to incorporate VT and bibliotherapy with other approaches, the reader is referred to Fairchild (1984).

RATIONAL EMOTIVE EDUCATION (REE)

Introduction

REE, the application of RET, is a cognitive approach emphasizing the use of thought, belief, assumption and rationale to decrease personal misery and to increase interpersonally effective behavior. The basic premise of REE is that if you can change irrational ideas, you will change the self-defeating feelings that are associated with them along with the maladaptive behaviors that accentuate the problem. Rational/emotive techniques have been applied for many years in working with children, particularly as an affective curriculum used in the classroom (Knaus, 1974).

ABCs

The first step of REE is teaching the students the "emotional ABCs" (Ellis, 1973). The ABCs are as follows:

A - a person's perceptions (events, persons, places)
B - person's thoughts about (A)
C - person's feelings triggered by (B), his/her thoughts about (A)

First, you perceive something. Second, you have thoughts about it. Third, you have emotional (gut) feelings about it.

Figure 1 demonstrates that emotions are not caused by external stimuli (A) — it is one's thinking (beliefs and attitudes) about the event (B) that causes our feelings (C). The books You and Your Emotions, M.C. Maultsby, and Rational Counseling Primer, H. Young, are also excellent sources to use when teaching children the ABCs of rational thinking.

The goal of the ABC unit of instruction is to have the students learn that (A) does not directly cause (C). People's own beliefs and attitudes [(B) about (A)] cause (C). After these instructional period comments such as "This is boring," "He makes me sick," "He made me mad," "This room drives me crazy," will no longer be valid explanations for the causes of their emotions. Homework could include a list of statements of people (teachers, parents, friends) that demonstrate they are blaming objects, persons, and events for their feelings and actions.

Rational Thinking/Behavior

Thoughts (B) about an event (A) cause feelings (C) and these feelings generate a behavioral response. With this premise of REE examined, the next step is to teach your students how to make only rational changes in their thoughts. This objective is done by teaching them to check the rationality of their thoughts by being able to answer yes to three of the following five questions:

1. Is my thinking based on obvious facts?
2. Will my thinking best help me protect my life?
3. Will my thinking help achieve my goals?
4. Will my thinking best help me prevent my most unwanted conflicts with other people?
5. Will my thinking best help me feel the emotions I want to feel without having to use alcohol or drugs? (Maultsby, 1986, p. 216)

The students learn that if at least three out of five of the above criteria apply to what they are thinking, they can then assume their thought (B) to be a rational one.

Maultsby (1984) presents a systematic approach to analyzing our reactions to facts and events. This is called Rational Self Analysis or RSA (Figure 2). The main objective of the RSA is to convince students that the events and objects do not cause one to feel badly—thoughts do. Sections A, B, And C are the emotional ABCs. Section D_A challenges Section A. This is done by asking the students to write down the events as if they had been recorded by a camera. Section D_B challenges the person's self-talk using the five criteria for rational thinking.

When incidents happen in school that trigger irrational thoughts and actions, have the student(s) fill out an RSA. Figure 3 illustrates two forms that could be used for Rational Self Analysis of time outs. Teachers can also verbally present the RSAs to students.

Figure 1

Thoughts, Feelings and Thunderclouds

OH BOY!
This means snow in the mountains for skiing! GREAT! Now I don't have to mow the lawn- or wash Dad's car!
HOW AWFUL!
I can't stand rain! It always rains when I want to ride my bike!
C1
Happy
C2
Depressed

Emotions are not caused by events. Let's take as an example two people standing in the rain. These two people can have two different emotions about the rain. One person (C1) might feel happy, and the other (C2) depressed.

Note: From J. Anderson, Thinking, Changing, Rearranging. Eugene, Oregon: Timberline Press, 1981, p. 11.

Figure 2

FORM FOR ABC'S OF WRITTEN RATIONAL SELF-ANALYSIS (RSA)

A SECTION
(FACTS AND EVENTS)

The teacher tells you to read aloud in class.

B SECTION
(SELF-TALK)

B_1 "He is trying to pick on me."

B_2 "I'm going to get him back."
"I'll do something to cause an uproar."

B_3 "I can't read."

C SECTION
(FEELINGS)

Angry - "I hate him."

D_A SECTION
(CHALLENGE TO A)

This event did happen.

D_B SECTION
(CHALLENGE TO B)

D_1 Cannot prove: "He calls on other kids that do not read well."

D_2 "Will not protect my life."
"Will not get me what I want."
"Will not keep me out of trouble."

D_3 Cannot prove: "Reading is difficult for me, but I can."

E SECTION
(WAY I WANT TO FEEL)

Acceptance - "I'm doing the best I can."

Figure 3

WRITTEN ANALYSIS OF TIME OUT

The situation was this: _____

_____

My thought(s) on the situation was/were: _____

_____

My feeling(s) on the situation was/were: _____

_____

Because of these feelings, my actions were as follows: _____

_____

Suggestions

Irrational thoughts:	Negative feelings:	
1) "Everybody must approve of me; I'm a jerk"	angry embarrassed	disgusted frustrated
2) "I must be good at everything; I failed, I'm no good"	annoyed	grouchy
3) "Things should be different; I hate my life"	depressed guilty	confused jealous
4) "It's your fault I feel this way; you make me so mad"	nervous	revengeful
5) "I can't help myself"	worried	stubborn
6) "My way or no way"	ashamed	worthless

The Challenge

The situation was this: _____

_____

Rational thoughts on the situation could have been as follows: _____

_____

Because of these thoughts, my feelings could have been as follows: _____

_____

Because of these feelings, most likely my actions would have been as follows: _____

_____

Suggestions

Rational thoughts:	Positive feelings:
1) "I can control my anger; I'm responsible for my day"	joyful cheerful
2) "There is more than one way of doing things"	loving
3) "Everybody doesn't have to like me"	excited confident
4) "It is OK to make mistakes I'm only human - I'll try not to let it happen again"	grateful hopeful
5) "I don't have to control things"	proud
6) "I can be flexible"	satisfied
7) "The thing that happens to me is the way it should be"	acceptance

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By this time the students have learned that the fewer irrational ideas a person has the greater his or her chances are for feeling the way he really wants to feel—happy. However, over the years these self-defeating beliefs (Ellis, 1975) have become such a part of their personality that the person most likely is unaware they have them.

There are two excellent books for teaching students to examine their belief systems. They are Anderson's Thinking, Changing, Rearranging (1981), and Cisek and George's Life Skills Training Associates (Third Edition, 1985). Anderson calls irrational thinking "junk thought" while Cisek and George describe it as "silly" thoughts. Both books warn against using words like "can't," "should," "have to," "must" and "need" because these words have a connotation of a person not having any control. Rational thoughts tell yourself that you do have control of your emotions and that you can solve problems. In Thinking, Changing, Rearranging, 11 irrational thoughts as identified by Ellis (1962) are listed as follows:

1. Everybody must love me!
2. I must be good at everything!
3. Some people are bad! They must be punished.
4. Things should be different!
5. It's your fault I feel this way!
6. I know something bad will happen soon!
7. It's easier not to even try!
8. I need someone stronger than me!
9. I can't help being this way.
10. I should get upset about your problems.
11. There is only one good way to do it. (pp. 33-38)

In the Life Skills: Finding Solutions (Chapter 4), five of the most common silly thoughts are:

1. I must have everything my way.
2. I must be liked by everyone.
3. I must do well in everything—school, sports, work.
4. People must be fair to me.
5. Things must turn out the way I want when I want. (p. 40)

Each book has its own unique way of demonstrating to the reader that if they are feeling upset, it is probably because one or more of their thoughts are self-defeating.

Once the students have been taught to recognize self-defeating thoughts, it then becomes important to teach them positive, rational thoughts to substitute or replace the "junk" thoughts. Anderson lists the following rational thoughts that will not cause problems:

1. Everybody doesn't have to love me.
2. It's OK to make mistakes.
3. Other people are OK, and I am OK.
4. I don't have to control things.
5. I am responsible for my day. (my favorite)
6. I can handle it when things go wrong.
7. It is important to try.
8. I am capable.
9. I can change.
10. Other people are capable.
11. I can be flexible. (p. 51)

Each of the programs mentioned above gives the teachers written exercises that help students to distinguish between rational and irrational thoughts. Anderson's and Cisek and George's books supply the teacher with many assignments to be done in class or at home.

At this point, your students probably have gained intellectual insight into the principles of REE. However, insight is not enough. The students need to practice what they have learned through in-class activities and homework. After much practice and hard work, students will gain emotional insight which will lead to new personalities.

Summary

REE's goal is the teaching of an attitude of emotional responsibility. In other words it tries to show people that they have control over how they feel. Through direct teaching of rational self-analysis and

critical thinking, REE instructs students how to live as comfortably as possible in a situation which cannot be significantly changed (Bernard & Joyce, 1984).

Research has shown (Bernard & Joyce, 1984, Table 1.6, pp. 33-35) that children of all ages can acquire the content of REE lessons. However, within the same research, changes in irrational beliefs of students have not "generally resulted in concomitant large-scale changes in behavior" (pp. 10-11).

Wagner (1966) suggested the following as advantages to using RET with children:

1. Rational counseling is easy to learn and to apply for the teacher.
2. Rational counseling teachs the child to live in his environment.
3. Rational counseling permits immediate intervention and a direct attack on the present problem.
4. The basic principles are easy to understand, apply and can be adapted to children of most ages and IQs. (p. 28)

Another distinct advantage of using REE is its emphasis on education. Because REE techniques include didactic instruction, homework assignments, role playing and rehearsal, it is especially suitable for a school setting.

TRANSACTIONAL ANALYSIS (TA)

Introduction

Transactional analysis is a humanistically oriented therapy developed by Dr. Eric Berne. It relies heavily on one's own potential for sensing and making judgments. TA begins as an educational process with didactic instruction constituting a major part of the approach. TA provides a rational method for students to think of and understand interpersonal behavior.

Winners - Losers

In the BD classroom setting a good starting point is an examination of the TA term "scripting." People's scripts determine the role they play with their family, school and friends. As children, we are given script instructions by our parents and all other significant people in our lives (James & Jongeward, 1973). For simplification, students are taught that there are two scripts we all follow—that of a winner or loser.

1. A winner knows the reality of himself, thinks rationally, is a productive person, an "okay" person who thinks he can be a success.
2. A loser is known for irrational thinking and actions, a not "okay" person who makes the same mistakes over and over.

Many of the students in your BD classes have probably been playing out loser scripts. School has become their stage to perform their learned roles. A definite point is made to the student that a major part of the definitions of winners and losers is the idea of being rational and irrational.

Video taping can be used. During the video presentations selected for this unit, stress the idea of the script the characters are playing out, winners - losers. (It might be interesting to see if the students' opinions are based upon the five criteria for rational thinking/ behavior.) Also emphasized is the fact that losing scripts can be done away with if they are willing to change.

PAC - Parent, Adult, Child

The next unit examines the TA concept of ego states (personalities - voices). Teaching begins by explaining that there are three distinct personalities inside us: a child, a parent, and an adult (Berne, 1971, 1973).

The parent (P) personality inside us includes two voices, the nurturing parent and critical parent. The nurturing parent (NP) is the supporting, caring parent. It makes us feel we are worth something. The critical parent (CP) is the guilt and anger producing part of us. The CP makes us feel badly about ourselves by telling us we are misbehaving or not doing as we should or ought to.

The adult (A) is the thinking, rational person within us. The adult consistently uses the five criteria for rational thinking/behavior. It sees the world as it is, not the way it should be or ought to be."

The child (C) is our wonderful, loving, hating, creative, devious personality. The child ego state develops into four discernible parts: the natural child, the adaptive child, the rebellious child, and the little professor child. The natural child is the fun loving, impulsive (happy one minute and angry next) part of us. The natural child can be very self-centered (just like a three-year-old), not caring about other people's emotional health. However, the natural child can be loving and spontaneous (just like a three-year-old).

The adaptive child does pretty much what the adults want him to do and say. The adaptive child thinks

he is "Okay, if" he pleases significant others in his life. This personality can become quite depressed if he/she thinks significant others find him/her as not being "okay." Many times the adaptive child will withdraw out of fear. The ways the adaptive child may choose to withdraw are faking illness, doing activities that require being alone, hiding in bedroom, daydreaming, or tuning people out.

The rebellious child ego basically dislikes all adults who are in a position of authority. The rebellious child will spend a good share of most days scheming to gain revenge on those "responsible" for his problem(s). Students in the rebellious child ego are most likely thinking in one form or another the self-defeating thoughts of "Things should be different."

Finally there is the little professor personality. This character thinks he has all the answers and feels he is being "cool." Actually most adults can see through his "games' and he usually ends up making a poor decision. His adult-like cause and effect relationships are contaminated by "hair-brain" schemes that are destined to failure.

The child is the foundation of a person's self-image. A person's feelings of being a winner or loser are likely to stem from their child ego state. So, two questions that could be brought up in a group discussion are, "When you find yourself in the child ego state, do you think you are a winner or loser?" and "When you are in your child ego state, do you feel angry most of the time or happy most of the time?"

Figure 4 is an exercise designed to help students apply their knowledge of ego states to different situations. It also demonstrates that the "CP" can really turn off some people. With this activity, stress to the students the fact that if they want to initiate change, it is best to stay in the adult personality. To get their way, they don't want the other person to get upset with them and ignore their good ideas.

Figure 4

"ADULT MESSAGES"

Instructions: When one person wants to modify another's behavior, it is to give an adult message-- one that is non-judgemental and gets your point across.

Fill out chart below using capital "P" messages and "adult messages".

I. Conflict Situation	II. Critical "P" Message	III. Adult Message
1. A father is upset because his daughter often arrives home after midnight curfew.	You'd better be in by midnight or else!	I wish you would come home by midnight because when you don't, I'm afraid you have been hurt or something (calm).
2. A younger brother/sister is smoking and experimenting with drugs.		
3. A mother is upset with her son when he sits down to watch TV (one more program) because he has his room to clean.		
4. The teacher is interrupted for the third time by inappropriate behavior by the same student.		
5. A student becomes upset with the teacher over doing what he thinks is a too difficult assignment.		
6. A student is upset because he is teased by a bully.		

Note: From Astructured, Sequential, Eclectic Approach to Changing the Behaviors of Secondary Behavior Disordered Students by D. Fairchild, 1984, Project Excellence Grant, Iowa DPI.

Hooking

The next TA teaching unit has to do with the concept of "hooking" people. Instruction can begin by asking the students if they know when they are making a person go from the adult ego to critical parent ego (e.g. veins in neck expanding, face becoming red, voice becoming louder, talking though teacher with words like, "If you ever . . . ," "One more time . . .). When students see a person going into their critical parent, this means they're "hooking" this person (James & Jongeward, 1973; Freed, 1976). After recognizing these warning signs, this is the time to tell themselves to begin thinking and acting rationally (adult ego) and to tell their rebellious child to shut up! Also, point out to the students that as they learn to recognize the signs of critical parent egos, they must also recognize the signs of themselves slipping into a rebellious child ego. Once they have been hooked, they are expected to take steps to avoid the pain the rebellious child can heap upon them.

At this time, tie into the "hooking" concept the ABC technique of rational thinking. (This may disturb the purist in our midst.) Example:

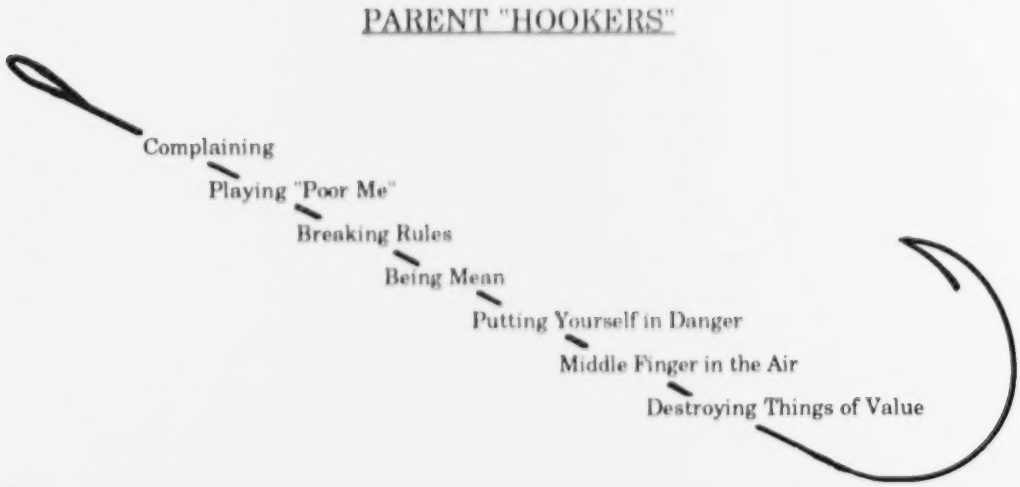
Event (A): (Critical Parent Teacher)	"I suppose you don't have your assignment done today. I'm sick and tired of your doing nothing! What is the matter with you."
Thoughts (B): (Rebellious Child Ego)	"I'm sick and tired of you. I hate you and this class."
Feeling (C): (Action)	Anger Let students fill this part in.

Now analyze the preceding situation by seeing what would happen if the student "caught" himself being "hooked' and took steps to control the situation in a rational way. In other words, do a Rational Self-Analysis (RSA).

One of the crucial steps in the generalization process is to increase the student's self-awareness. If a student with behavioral disorders is able to examine and understand his thoughts and feelings, then each inappropriate behavior can serve as a signal to produce thoughts and behaviors to stop the continuation of the irrational behavior. If the student knows he is being "hooked" and can understand why the situation is occurring, he an take steps to become "unhooked" and feel the way he wants to feel. At this point the student begins to think he is in control—that he is making a positive difference.

Another homework assignment is to have students list their top four critical parent hookers and the two top ways they can be "hooked" by teachers. Use Figure 5 and discuss why each could be bringing out the critical parent personality in their parent(s). After the discussion, have the students list their own parent hookers.

Figure 5



Game Playing

When a person deliberately sets up situations so as to re-experience old feelings, we call this game playing (Berne, 1964). These old feelings may be ones of guilt, fear, jealousy, anger, inadequacy,

helplessness, nervousness, etc. (A unit of instruction on TA concept of "stamp collecting" would be worthwhile before teaching this unit on game playing.) People usually play games to help them act out their scripts in life.

The best way to teach game playing is to explain how some of the games are played (Berne, 1964).

1. "Kick Me" - "Kick Me" is played by people who like to feel down on themselves. It is a fairly simple game to play. All a person has to do is something that provokes a put down from someone. Then the collection of inadequate feelings begins which is why the game is played.
2. "Stupid" - "Stupid" is also an easy game to play in that players only have to be good at saying, "I don't know" or "I can't get this' or "What do you mean?" Playing "stupid' is a real put down of themselves and gives a clear signal to others that they are so inadequate that they cannot be expected to do much on their own and will have to be watched closely. They get out of doing work, but they also get labeled as being irresponsible, which heaps upon them much CP.
3. "Yes, but . . . " - People can play this game by saying, "Yes, but if I do this . . . " to every suggestion that they try another approach to solve their problems. Again, this is an easy way to avoid responsibility for one's behavior.
4. "Ain't it Awful" - This game is played by sitting around and saying how awful everything is—teachers, parents, cops, etc. The players in this game know they have problems but will not attempt to find solutions to them. Instead, they will only complain about how others are creating problems for them. Once again, responsibility for one's actions is evaded.
5. "Uproar" - If students can create instant chaos in a classroom, then they can be a player in the game of "Uproar." In "Uproar" a player allows himself to become angry. Also, by every means possible, the student will try to cause the teacher to become an extremely big "CP." When the student sees he has "hooked" the teacher, he steps up his "rebellious child" attack until there is general uproar in the classroom. This game is extremely popular among those kids who have a genuinely difficult time with school (e.g. learning disabled student). For example, instead of admitting to themselves that they need help or to save the embarrassment of asking a "dumb" question, they avoid the problem by creating an uproar. Also, this is an obvious way to get attention. (Some attention is better than no attention.)
6. "I Could Do That If I Wanted To" - This game is played by students who have difficulty coping with the feelings of failure. When faced with a difficult assignment at which they think they will fail, they just say, "I could do that if I wanted to!" Players in this game fear being embarrassed in front of peers. They would rather not do an assignment than risk being made fun of for having the wrong answer, which they are sure of having.
7. "Poor Me" - This game is played by people who enjoy misery. They continually manipulate people to carry out their script of being everyone's victim. These people do and say things that will prove to the world they are not lovable and capable.
8. "If It Weren't for You" and "See What You Made Me Do" - The purpose of this game is to prove to others that it is not their fault for acting irrational. The players in this game believe people, events, and objects cause one to feel badly.

Life Positions

There are four life positions: (1) I'm okay, you're okay; (2) You're not okay, I'm okay; (3) You're okay, I'm not okay; and (4) You're not okay, I'm not okay (Freed, 1976). These positions represent the concept people have of their own worth as well as the worth of others. Present the following information to the class.

1. "I'm okay, you're okay" - This is a really healthy position. You're a winner and so is everyone else. You respect other people and from this position comes much rational thinking and behavior.
2. "I'm okay, you're not okay" - This is called the distrustful position. A person thinks he is okay, but everyone else is a little suspicious. He blames others for their problems. This seems to be a real common position of kids in a BD classroom. (It's not my fault.")
3. "I'm not okay, you're okay" - This is a common position. Students that are in this position may think the world is hopelessly difficult. This position allows kids to avoid facing their problems.
4. "I'm not okay, you're not okay" - Those people in this position lose interest in living. Life is just no good. They think there is no way to make it.

People play games to reinforce feelings acquired since childhood. The basis for most games comes from the life position of "I'm not okay, you're not okay." If a person thinks he is a loser, he'll do whatever

he has to do to convince people he is a loser (self-fulfilling prophecy).

Summary

In this section Transactional Analysis was presented as a useful tool to the understanding of behavior. The TA theory was examined which asserts that each person has three ego states which are separate and distinct sources of behavior: the Parent ego, the Adult ego, and the Child ego state. Anything that happens between people will involve a transaction between these ego states. Much detail was given to the idea that people play psychological games with one another and why "losers" play games. Emphasized was the goal of doing away with these games and the establishment of the "most open and authentic communication possible between the affective and intellectual components of the personality" (Berne, 1964, p. 216).

As is the case with REE, research (refer to Journal of Transactional Analysis) has suggested that with adaptation children of all ages can learn the concepts of TA. This approach encourages the use of words that are simple, direct and often colloquial (games, scripts, stamps). Perhaps the greatest advantage to using TA is in its availability. Perhaps more books have been written on the application of TA for all developmental levels than on any other affective curricula. Implementation of TA into the routine of a BD classroom is not difficult. By reading books and attending seminars and workshops, teachers can gain the necessary insight to instruct their students using TA curriculum. Also, video therapy is easily incorporated into the TA approach.

MORAL EDUCATION

Jean Piaget provided much of the early research concerning the theory that moral development goes through a series of interactions with the environment. Piaget's work provided the basis for Lawrence Kohlberg and his associates who furthered the theory and developed affective curricula in the area of moral education.

The moral educational approach differs from values clarification in that its major goal is to increase the reasoning ability of students. Values clarification may be effective in helping students arrive at their own conclusions about issues. However, in using the values clarification curriculum, teachers can only hope their students' freely chosen beliefs and behaviors are within the norms of society. Using group discussion of moral dilemmas, moral education examines issues from both their own perspectives and the perspectives of others. Through these discussions students are exposed to different stages of moral reasoning with the purpose being to stimulate the student's reasoning to a higher stage. This is desirable because higher level reasoning allows more options for analyzing and solving problems that are in line with principles of fairness and justice (Goldstein, 1981). Figure 6 gives Kohlberg's six stages of moral reasoning.

Unlike values clarification, rational emotive education and transactional analysis, moral education lacks a sequenced curriculum. Also there is a higher level of demands placed upon the teacher as group facilitator. Because of the integral role the teacher plays in the implementation of a moral development curriculum, many teachers will not invest the time needed to help BD students reason in more sophisticated fashion (Zionts, 1985). As Zionts (1985) states, "Teachers should be aware that moral development is not a quick and easy process . . . " (p. 175)

The inclusion of a moral development program into a BD classroom routine can have many positive effects. Besides working toward a higher level of reasoning, the discussion can provide skills training in communication and creativity. More importantly students enhance their skills in the area of human understanding (Zionts, 1985). For further research on moral education refer to Lockwood (1978).

CONCLUSION

This chapter stresses the idea that teachers have to design their BD programs to meet the developmental needs of individual students. Earlier chapters described educational/behavioral management systems designed to identify and remediate maladaptive classroom behaviors. These programs concentrate more on the observable, external behaviors, therefore, sometimes ignoring problems of a psychological nature. The intent of this chapter was to demonstrate how some approaches of affective curricula can be implemented in conjunction with or as an extension of a behavioral management program.

Figure 6

KOHLBERG'S SIX STAGES OF MORAL REASONING

I. PRECONVENTIONAL LEVEL

At this level the child is responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels in terms of either the physical or the hedonistic consequences of action (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels. The level comprises the following two stages:

STAGE 1: PUNISHMENT AND OBEDIENCE ORIENTATION

The physical consequences of action determine its goodness or badness regardless of the human meaning or value of the consequences. Avoidance of punishment and unquestioning deference to power are valued in their own right, not in terms of respect for an underlying moral order supported by punishment and authority (the latter being stage 4).

STAGE 2: INSTRUMENTAL RELATIVIST ORIENTATION

Right action consists of that which instrumentally satisfies one's own needs and occasionally needs of others. Human relations are viewed in terms similar to those of the market place. Elements of fairness, or reciprocity, and equal sharing are present, but they are always interpreted in a physical pragmatic way. Reciprocity is a matter of "you scratch my back and I'll scratch yours," not of loyalty, gratitude, or justice.

II. CONVENTIONAL LEVEL

At this level, maintaining the expectations of the individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious consequences. The attitude is one not only of conformity to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting, and justifying the order and of identifying with the persons or groups involved in it. This level comprises the following two stages:

STAGE 3: INTERPERSONAL CONCORDANCE OR "GOOD BOY-NICE GIRL" ORIENTATION

Good behavior is that which pleases or helps others and is approved by them. There is much conformity or stereotypical images of what is majority or "natural" behavior. Behavior is frequently judged by intention: "he means well" becomes important for the first time. One earns approval by being "nice."

STAGE 4: "LAW AND ORDER" ORIENTATION

There is orientation toward authority, fixed rules, and the maintenance of the social order. Right behavior consists of doing one's duty, showing respect for authority, and maintaining the given social order for its own sake.

III. POST-CONVENTIONAL, AUTONOMOUS, OR PRINCIPLED LEVEL

At this level there is a clear effort to define moral values and principles that have validity and application apart from the authority of the groups or persons holding these principles and apart from the individual's own identification with these groups. This level again has two stages:

STAGE 5: SOCIAL-CONTRACT LEGALISTIC ORIENTATION

Generally, this stage has utilitarian overtones. Right action tends to be defined in terms of general individual rights and in terms of standards that have been critically examined and agreed upon by the whole society. There is a clear awareness of the relativism of personal values and opinions and a corresponding emphasis on procedural rules for reaching consensus. Aside from what is constitutionally and democratically agreed upon, the right is a matter of personal "values" and "opinion." The result is an emphasis upon the "legal point of view," but with an emphasis upon the possibility of changing law in terms of rational considerations of social utility (rather than freezing it in terms of stage 4 "law and order"). Outside the legal realm, free agreement, and contract is the binding element of obligation. This is the "official" morality of the United States government and constitution.

Figure 6 (cont).

STAGE 6: UNIVERSAL ETHICAL PRINCIPLE ORIENTATION

Right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency. These principles are abstract and ethical (the Golden Rule, the categorical imperative); they are not concrete oral rules like the Ten Commandments. At heart, these are universal principles of justice, of the reciprocity and quality of human rights and of respect for the dignity of human beings as individual persons.

(Taken from Edelman & Goldstein, 1981, pp. 288-289; original source: L. Kohlberg. Stages of moral development as a basis for moral education. In Moral education: Interdisciplinary approaches. C.M. Beck, B.S. Crittenden & E.V. Sullivan (Eds.), 1971).

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Chapter 8

TEACHING SELF-CONTROL TO STUDENTS WITH BEHAVIOR DISORDERS

Mary Delagardelle
Assistant Principal
Mason City Community School District
Mason City, Iowa

Marlene Studer
Crisis Interventionist
Mason City Community School District
Mason City, Iowa

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Chapter 8

TEACHING SELF-CONTROL TO STUDENTS WITH BEHAVIOR DISORDERS

Mary Delagardelle
Marlene Studer

INTRODUCTION

In setting standards for behavior disorder programs there should be an inherent goal of teaching the student to construct and maintain his own positive environment. An important step in this process is to teach the student self-management toward the proper goals. Self-control (or self-management) develops in stages. Students first learn to respond to external controls and move gradually from there to self-regulation and more internally motivated controls. Previous chapters have dealt mainly with a variety of interventions designed to implement programs focused on externally controlling the student's behavior. In this chapter we will deal with several strategies for the initial training stages designed to help students make the leap from external to internal control of their behavior and emotions.

The strategies discussed in this chapter represent a wide range of interventions that support our basic beliefs about educational programs for behavior disordered students:

1. We believe BD students are distressed by feelings of lack of control in their lives; therefore, BD programs should address this need.
2. We believe BD programs should help students gain skills which empower them in their own lives.
3. We believe it is the school's responsibility to lift each student's awareness of their own personal power and to teach them to act upon it in an appropriate way.
4. We believe BD students do not have to perpetuate former negative behavior patterns and that all students can and will learn if programmed for appropriately.
5. We believe there is no single intervention which works for all students, and that a prescriptive approach is necessary in order to meet all students' needs.
6. We believe in affirmation of individual differences and provision of a nurturing environment which allows each child to develop according to his own unique potential.
7. We believe it is important for BD students to learn appropriate social skills and adaptive behavior in order to successfully interact in our society.
8. We believe that any BD program should constantly be focused on moving away from the initial highly structured teacher directed environment to a more self-active student directed program.

A student's self-regulation of impulses is extremely important in his/her everyday life and in thee classroom. Self-control can make the difference between success and failure, and between personal satisfaction and discouragement. Self-control is also a prerequisite to the responsible exercise of freedom and provides the person with realistic choices (Fagen, Long, & McArthur, 1984). This chapter will attempt to define self-control, establish the need for direct instruction in this area, and discuss current curriculum methods, and intervention strategies for teaching students self-control.

Definition

Definitions of self-control vary across reviewers as well as across psychological orientation. Behaviorists define self-control as the application of operant procedures to one's own behavior while cognitive behaviorists include the importance of covert events and the use of private thoughts to control overt behavior.

Fagen, Long, and Stevens (1975) define self-control as "one's capacity to flexibly and realistically direct and regulate personal action or behavior in a given situation." A similar definition by Buffington and Stilwell (1980) states that "self-control is concerned with the individual's ability to direct and to manage personal action" (p. 152). For the purpose of this chapter, these two examples will provide a working definition of self-control which should help educators approach the teaching of self-control as an educational objective.

Need for Direct Instruction

A commonality among students identified as having emotional/behavioral needs appears to be a deficit in the use of skills to direct and manage personal action in a constructive and productive way. Since this is a consistent problem among this population of students, then significant attention to this area and direct instruction in self-control strategies are needed in all BD classrooms. Often, teachers feel that effective implementation of a behavior management system teaches students self-control; however, there is an acute need to move beyond external control to a more internal, student regulated, self-control level.

When we acknowledge that direct instruction is needed, how do we decide how we are to go about that instruction? We can use a "blanket therapy" in which we implement the same instruction and technique for all students at all levels of self-control. However, the idea that the same mode is correct for the many different kinds of behavioral disorder symptoms and with students at different levels of self-control offends common sense. We believe that this instruction, as with all instruction for handicapped students, should be prescriptive. We hold with Goldstein, Glick, Reiner, Zimmerman, and Coultry (1986), that: "Our central belief and operating assumption with regard to all habilitative interventions . . . is that effective intervention is differential intervention. Simple to define in general terms, but quite difficult to implement effectively, prescriptive programming means different youngsters will be responsive to different change methods" (p. 8).

Goldstein et al., further state that:

> "Optimal prescriptions should be tridifferential, and thus specify type of intervention by type of client by type of change agent . . . Interventions, as received by the youths to whom they are directed, are never identical to the procedures as specified in a textbook or treatment manual. WHO administers the intervention does make a difference, an assertion for which there already exists supporting evidence" (p. 12).

The reader may refer to Goldstein et al.'s (1986) Aggression Replacement Training for further information regarding the change agent, client, intervention strategy match. For information regarding stages of student progression toward self-control the reader is directed to Rezmierski's chapter on "Developmental Interventions with Behaviorally Disordered Youth" in Social/Affective Interventions in Behavioral Disorders (Grosenick, Huntze, McGinnis, & Smith, 1984), a part of the Iowa Monograph Series. In this chapter we will discuss specific intervention strategies for teaching students self-control from both a theoretical and practical perspective. However, it merits further reminder that successful planning for teaching students self-control needs to consider all of the above-mentioned prescription areas.

COGNITIVE BEHAVIOR MODIFICATION

Research and Theory

Can you recall driver's education training? Do you remember that the instructor "talked" you through the beginning stages showing you what to do, "Turn the key, shift to Drive," etc. The instructor modeled for you so that you could see exactly how to do it, sat beside you while you recited the litany of steps and simulated the process, then let you practice for "real" while talking yourself through the steps out loud. If you encountered a problem, you recited what to do while doing it. After lots of practice, you began to talk the steps only to yourself until finally conscious talk was erased, and driving became one of your automatic processes—except in a moment of crisis—when you still revert back to talking yourself through the situation.

If you remember, then you will quickly grasp the rationale for the belief that self-control can be guided through inner talk, and that it is this belief that nurtures the largest body of interventions for self-control which come under the label of cognitive behavioral modification.

> Cognitive Behavior Modification is the term coined to describe the integration between cognitive therapy and behavior modification. It has only been in the past few years that cognitive-mediational processes have been integrated (Bandura, 1977; Meichenbaum, 1977) in the procedures for behavioral change. There is a large body of research affirming the efficacy of this integration dealing with self-instructional procedures with children with deficits in self-control, and social-cognitive problem solving procedures. However, according to Kendall and Braswell (1982, p. 672), the research centers on self-control. Most investigations, however, have focused on problems associated with deficits in self-control (e.g., Camp, Blom, Herbert, & Van Doorninck, 1977; Douglas, Parry, Marton, & Garson, 1976; Kendall & Finch, 1978; Meichenbaum & Goodman,

1971). Recent studies have examined the effectiveness of a cognitive-behavioral intervention for teaching children self-control. Kendall and Wilcox (1980) examined the differential effects of variations in the type of self-instruction taught to the children. Treated children, both individual and group, showed significant improvement on teachers' blind ratings of self-control as compared to nonspecific treatment controls.

Self-control is taught through the use of a series of steps in which overt speech, modeling, practice, and covert speech are used. Inner speech becomes the guide in effecting the behavior change.

The role of inner speech in relation to behavior change is clearly discussed by Meichenbaum in his book Cognitive Behavior Modification (1977). To him, a central question is, "How should we view inner speech, how can we alter inner speech and images, and what are the subsequent effects on thoughts, feelings, and behavior?"

Meichenbaum then explains the stages of self-instructional training in which the subject is guided from the speech of others to his own outer speech to inner speech in fostering self-control. The inner dialogue combined with behavior modification steps is what comprises CBM, but the focus is on the internal dialogue as stated by Meichenbaum (1980):

> A cognitive behavioral perspective focuses on the client's (as well as the educator's) internal dialogue (i.e., the set of conscious self-statements and images). Given the state of the art of cognitive behavioral training with exceptional children, educators should consider the nature of their own internal dialogue. They should ask themselves, do I have the penchant to "catastrophize" about the role of cognitive factors in the etiology, maintenance, and treatment of exceptional children? Or is the nature of my thoughts one of problem solving, based on questions such as: What is the problem? Is this what we have tried in the past? What has worked, and more importantly, what hasn't worked? and Why?
>
> Indeed, the cognitions described above are in many ways the same set of cognitions one would like exceptional children to employ. Perhaps educators can work as "models" for children. (p. 87)

As we gained control of our driving through outer and inner speech, perhaps we can use this tool to increase control of our own lives so that wee might serve as better models of our children. A working knowledge will help us in order to teach them interventions to use as tools in gaining increased and continued control of their own lives. The following are interventions we might choose.

Self-Instructional Training

Self-instruction training refers to "teaching children to talk to themselves." The student learns to use covert speech in the form of verbal coping strategies to control overt behavior. "Self-instructions are self-directed statements that provide a thinking strategy for children with deficits in this area and serve as a guide for the child to follow through the process of problem solving" (Kendall & Braswell, 1985).

Self-instructional training has been found to be an effective self-control strategy in a variety of clinical and experimental settings, but educationally relevant examples are reflected in the work of Meichenbaum and Goodman (1971); Robin, Arnel, and O'Leary (1975); Bender (1976); Bornstein and Quevillon (1976); Burgio, Whitman, and Johnson (1980); Bryant and Budd (1982); Camp, Blom, Hebert, and Van Doorninck (1977); Kendall and Zupan (1981); Genshaft and Hirt (1980); and Schleser, Meyers, and Cohen (1981). All of these investigators reported significant positive effects of self-instruction training in school settings with school-related skills and behaviors.

In these studies, self-instruction training was found to be effective in increasing prosocial behavior (Camp et al., 1977); decreasing distractibility, aggressiveness, and restlessness (Kendall, 1982; Kendall & Zupan, 1981); and with influencing academic skill behaviors and impulsive task strategies (Robin et al., 1975; Genshaft & Hirt, 1980; Malamuth, 1979).

The content of self-instruction usually includes a five-step procedure: Defining what is to be done, planning the strategy, directing self while performing, correcting errors, and self-reinforcing. In the case of incorrect answers, coping statements are used to help teach the child that he or she can try again and that making an error is not a horrible or awful experience. The following dialog illustrates the five self-instructional procedures.

Define the problem:	"Let's see, what am I supposed to do?"
Plan:	"I have to look at all possible choices."
Focus Attention:	"I had better concentrate and focus in, and think only of what I'm doing right now."

Make a choice:	"I think it's this one . . . "
Self-reinforcement:	"Hey, not bad. I really did a good job."
Coping statement:	"Oh, I made a mistake. Next time I'll try and go slower and concentrate more and maybe I'll get the right answer."

One important aspect of the self-instructional procedure is that the student not be taught to "say-what-we-say," but rather for the teacher to collaborate with the child to create her own self-directive statements. By doing this the sentences will be more meaningful to the student and he will be more likely to internalize the self-instructions and use them to think slowly through potential problems that may occur outside the classroom. In the beginning the teacher requires the student to use the self-instructions overtly, then gradually fades from overt (out loud) speech through a whispering phase, and finally to covert (silent) speech. Meichenbaum (1977) and Kendall and Braswell (1985) suggest the following sequence for teaching the self-instructional procedures:

1. The teacher performs the task and talks out loud while the student observes. (Cognitive modeling.)
2. The student performs the same task, instructing himself out loud, under the direction of the teacher. (Overt, external guidance.)
3. The student performs the task while instructing himself out loud. (Overt self-guidance.)
4. The teacher models the task while whispering the self-instructions.
5. The student whispers the instructions to himself as he goes through the steps. (Faded, overt self-guidance.)
6. The teacher performs the task using covert self-instructions with pauses and behavioral signs of thinking (e.g., raising eye brows, stroking chin, etc.).
7. The student performs the task using only private speech. (Covert self-instructions.)

In the early stages of self-instruction training it is advisable to use psychoeducational or academic tasks. Kendall and Braswell (1985) suggest using the Barnell Loft Specific Skills Series for initial application of the verbal self-instruction process. After the academic tasks have progressed successfully to the covert stage the teacher may introduce more abstract puzzles, games which provide a more social situation, and finally a transition to interpersonal situations. Each time new tasks are introduced it is advisable to return to the overt stage of verbalizing the self-instructions and proceed through the fading process again.

The decision to enter the covert phase is a key variable in this procedure. Because it is seldom possible to observe incomplete or incorrect verbal self-statements it is important not to enter the covert phase too early and miss opportunities to provide the necessary supervision of the self-statements. It may also be advisable to begin each class session with a review of the self-instructions and fade from overt to covert speech during each practice or training session. For a detailed description of the teaching sequence and sample lessons for twelve 50-minute sessions, the reader is referred to Developing Self-Control in Children: The Manual by Kendall, Padaver, Zupan, and Braswell (in Kendall & Braswell, 1985).

Cognitive Modeling

Modeling refers to exposing the student to an individual who actually demonstrates the behaviors or skills that are to be learned. Modeling also refers to observational learning which as Bandura (1969, 1971) emphasized, provides the observer with information that can be converted to mental images and covert mediating rehearsal responses that are then retained and later used by the observer as symbolic cues to overt behavior (Meichenbaum, 1977).

In cognitive behavior modification, cognitive modeling refers to the teacher's overt verbalization of her own self-guiding thought processes, problem-solving, or self-instructional activity in order to facilitate the learning process. In other words, the teacher would not only explain the steps for solving a problem to the student, but would also work with the student to demonstrate to him one way to think through the problem.

A wide variety of ways exist in which the model can demonstrate the behaviors to be learned. Some of the formats suggested by Kendall and Braswell (1985) included graduated modeling, symbolic modeling, filmed modeling, and participant modeling. However, more important than the specific manner in which the behavior is demonstrated is whether the model demonstrates "mastery" or "coping" behavior. A mastery model demonstrates ideal behavior where as the coping model provides a more strategic approach. Meichenbaum (1971) found a "coping model where the model makes occasional mistakes, shares difficulties and frustrations, and demonstrates coping strategies for dealing with failures" to be superior to a mastery

model.

The most effective modeling strategy is the model's stating out loud the cognitive coping strategies. This "talking-out-loud" while modeling offers a demonstration of the thinking through of a problem all the way to the solution and can be effective with both academic and interpersonal problems.

Cognitive Restructuring

Are we disturbed by what happens to us, or by what we think about what happens to us? Can a lemon for one be lemonade for another? Cognitive restructuring techniques are based on the belief that it is our interpretation of facts, not the facts, that influence our lives. Semantic therapists perceive a close connection among reason, emotion, and behavior.

Cognitive restructuring techniques seek to change the student's thinking, and the assumptions underlying these cognitions. The focus is on the irrational thinking. Disputing irrational thoughts is an important part of the technique. Coping strategies are also taught in order to give the student tools to manage their thinking.

Getting control of one's thoughts, then, is getting control of one's self. Three major proponents of these techniques are Ellis, Meichenbaum, and Beck. Ellis' rational emotive therapy (RET) (Ellis & Harper, 1975) has received the most attention. It consists of three steps: (1) determining the upsetting events, (2) determining the underlying beliefs that incite the negative emotions, and (3) changing these beliefs and thought patterns. Various means are used to counteract these beliefs and can be found in Ellis and Harper's (1975) A New Guide to Rational Living. Homework assignments are usually employed to gain the student's acceptance of the belief that negative self-talk is contributing to negative emotions.

Beck (1976) also focuses on irrational beliefs, but gives a large number of self-observation assignments in order to help the client note the relationship between thoughts and emotions. He uses concepts such as distancing, reality testing, authenticating observations, and validating conclusion.

Meichenbaum (1977) does not formally analyze irrational thinking but focuses on training the student to use specific problem solving and coping skills. This emphasis enhances the student's ability to generalize the skills he has been taught rather than use them only for specific situations.

D'Zurilla and Goldfried (1971) and Goldfried and Goldfried (1975) use a problem solving approach. They listen for an absence of specific, adaptive, cognitive skills and then seek to teach these missing skills and responses. (See the problem-solving section of this chapter under cognitive behavior modification.)

A variety of approaches can be used in altering thinking. Modeling and imagery rehearsal are two of the procedures that have been shown to be effective. These two strategies will be discussed later in this chapter.

The following is an example of the kind of negative thinking that cognitive restructuring seeks to alter:

> John has a firm belief that he is dumb. He knows he must be dumb because he has never done well in school, and things seem to be easier for other students, especially those who aren't in special classes. If he weren't dumb he would be in regular classes wouldn't he? John believes he cannot be worth much because if he were, school would be easy and parents, teachers, and peers would accept and admire him. Since he is dumb, there is no use in trying to complete assignments because he can't do them anyway, nor work on tests because, of course, they are too hard for him.

Anyone who has worked with behaviorally disordered students will recognize John and the many students who think like he does. How do we begin to alter his thinking? A curriculum that wee have enjoyed teaching and to which students responded well is Thinking, Changing, and Rearranging (Anderson, 1982). Anderson has completed a step by step manual for changing thinking based on Ellis' RET. The chapters are broken down into objectives with activities and worksheets for students in order to imbue them with the RET technique. It was written for students at the secondary level, and we found that they responded positively to the concepts and began to monitor their own and their peers' thinking. They seemed to especially like the disputing process of RET. This program consists of a teacher's manual, student book, and various supplementary materials such as posters, stickers, and duplicating masters. Information regarding ordering these materials can be obtained from Timberline Press, P.O. Box 70071, Eugene, Oregon 97401.

Another cognitive restructuring technique is verbal mediation. The day goes smoothly for Jim until he receives criticism, even moderate negative feedback sets off his temper and he begins to argue. The more he is allowed to argue, the more incensed he becomes. He is eventually sent from the classroom for disciplinary action. Negative feedback is the cue, anger is the response. Jim says he can't help it,

he just has this bad temper.

Verbal mediation is the use of inner talk to regulate behavior. Through a series of steps, Jim would be taught covert assertive responses to use to inhibit impulsive reactions. Think Aloud is a program which uses verbal mediation in training both cognitive and social problem solving. This program is reviewed in another section of this chapter.

A wealth of suggested materials for cognitive restructuring can be found in a catalog published by the Institute for Rational Emotive Therapy, 45 East 65th Street, New York, New York 10021. This catalog lists books, tapes, videos, and pamphlets, one of which is Rational-Emotive Education Manual for Elementary School Teachers, and another, Rational-Emotive Therapy with Children and Adolescents. There is also a workbook for sixth grade through high school called Thinking Straight and Talking Sense: An Emotional Education Program. All necessary information for ordering is contained in the catalog.

Problem Solving

Problem solving has frequently been considered with regard to impersonal, intellectual tasks such as puzzles, anagrams, and math skills. However, the cognitive skills required to solve these types of problems may not be functionally related tot he skills needed for solving interpersonal problems that may arise in day-to-day living (Kendall & Hollon, 1979). When working with students with behavior and self-control problems it is important to use a problem solving approach because problem solving skills are essential to personal and social adjustment as well as effective coping in social situations.

Why is a problem solving approach an important aspect of cognitive-behavioral therapies? (It is because successful problem solving is the result of various cognitive strategies which allow the person to consider all possible options, reflect on potential consequences, and make decisions about the choices.) Since the number of potential problems and their possible solutions is infinite, it makes more sense to focus on training the cognitive processes involved in problem-solving rather than on specific responses.

Spivack, Platt, and Shure (1976) identified six interpersonal cognitive problem solving skills that are relevant for successful coping in social situations:

1. Sensitivity to interpersonal problems.
2. A tendency to link cause and effect spontaneously (causal thinking).
3. Readiness to view possible consequences of actions (consequential thinking).
4. Ability to generate solutions (alternative thinking).
5. Ability to conceptualize step-by-step means for reaching specific goals (means-end thinking).
6. Ability to view situations from the perspective of others (perspective taking).

Studies (Spivack & Levine, 1963; Platt, Spivack, Altman, Altman, & Peizer, 1974; Platt, Scura, & Hannon, 1973) with emotionally disturbed adolescents consistently found significant deficiencies in means-end thinking, alternative thinking, and perspective taking. Platt, Spivack, and Swift (1975) have developed a comprehensive training program for adolescents with deficits in this problem solving skills. The interpersonal Problem Solving Group Therapy Manual presents scripts to be used by the group leader, materials for group exercises, homework assignments, and individual student workbooks (Platt & Spivack, 1976).

When directly teaching the process of problem solving it is important to include the following six steps:

1. Identification of the problem.
2. Generate a minimum of three options or choices of action related to the problem.
3. Identify positive and negative consequences of each choice.
4. Identify basic criteria for decision making and evaluation. (e.g. "My choice should not get me into trouble." "My choice should not hurt myself or others." "I will know I have solved the problem when . . .)
5. Make a choice and implement the solution.
6. Evaluate the results.

A wide range of formats for initial training and working through the problem solving phases with students are available. One such format, developed by Black, Downs, Bastion, and Brown (1984) is reprinted here with the authors' permission and permission of Father Flanagan's Boys Home-Division of Education. Their format uses the acronym "POCER" to help students internalize and generalize the problem solving steps.

Our experiences working with students with behavior and self-control problems have been instrumental in the development of this six-stage sequence for teaching the process of problem solving:

Stage One:

1. Using hypothetical situations, provide the student (or group) with practice in identifying what the problem is and labeling who owns the problem. (e.g. Given the situation where a student is asked

PROBLEM - SOLVING

P - Problem/Summarize

O - Options

C - Consequences

E - Elect Solution

R - Review Results

Note. From Motivation Systems Workshop Manual by D. D. Black, J.C. Downs, J. Bastien, and L. J. Brown, 1984, Omaha, Nebraska: Division of Education, Father Flanagan's Boy's Home.

POCER Problem-Solving Checklist

P **Problem** - What's the problem? When does it occur? How often? Why is it occuring?

O **Options** - What are some possible solutions to the problem?

1.
2.
3.
4.

C **Consequences** - What are the advantages and disadvantages of options that we agree to consider?

Option	Advantages	Disadvantages
1.		
2.		
3.		
4.		

E **Elect a solution** -

1. Which of the above solutions seems to be the most appropriate?
2. What will the student do to carry out the solution?
3. What will the teacher do to carry out the solution?
4. When will the solution begin to be implemented?

R **Review the solution** - When will we reconvene to review whether or not the solution was successful?

Note. From Motivation Systems Workshop Manual by D. D. Black, J. C. Downs, J. Bastien, and L. J. Brown, 1984, Omaha, Nebraska: Division of Education, Father Flanagan's Boy's Home.

to move away from his/her friends to a different table in the lunchroom as a result of his/her rowdy behaviors, BD students will often interpret this as being an unjustified request, the teacher's problem because he doesn't like the noise, and are unable to accept ownership of the problem as it pertains to them.)

2. Provide the student (or group) with ample practice in generating options to hypothetical interpersonal situations and in identifying both positive and negative consequences for each option. During this step it is best to use a brainstorming approach and accept all suggestions offered. It is important to avoid determining the best option at this step in order to stay focused on the skill of generating alternative responses.

Stage Two:

During stage two it is important to provide adult modeling of each step.

1. As a group, practice determining what basic criteria might be used in making a choice between options and discuss how these criteria might vary in different situations. (e.g. "My choice should not be against the law." "I should usually pick a choice with the most positive consequences and the least number of negative consequences.")
2. Given hypothetical situations, practice identifying how the person will know when the problem is solved. (e.g. "I will know my problem is solved when Kitty stops teasing me.")
3. Provide opportunities to practice making a choice using the options generated earlier. It is also beneficial to discuss as a group how these choices meet the criteria established for decision making and allow the group to vote on which choices they feel are the best and explain why.
4. Begin identifying the type of problems students their age might experience.

Stage Three:

1. Practice filling out a structured format sheet (POCER) by role playing the problem solving sequence with hypothetical situations.
2. Use the POCER sheet to solve problems as they arise in the classroom under the supervision of the teacher.

Stage Four:

1. As problems arise in the classroom, the student or students involved are asked to fill out the POCER sheet independently then report back to the teacher.
2. Homework assignments are given where students are asked to complete POCER sheets regarding problems outside the classroom and share the results with the teacher or the group.

Stage Five:

1. Students begin solving problems totally independently and are not expected to give feedback or fill out problem solving sheets.

Stage Six:

1. Work on cognitive restructuring activities to redirect their perceptions of problems as negative, crisis situations to a more positive view of problems as challenges and opportunities for personal growth.
2. Work on planning skills and goal setting activities.

Self-Regulation

Self-regulation skills are very important in teaching students self-control because they stress self-initiative and emphasize the student's participation in the treatment process. These skills can be broken down into three stages in which the students learn to change or maintain their behavior in the absence of immediate external supervision. These three stages are: (1) self-monitoring, (2) self-evaluation, and (3) self-reinforcement.

Self-Monitoring

Self-monitoring refers to a student observing and recording his own behavior for the purpose of improving it. Some reasons for having students monitor their own behavior include: it improves the target behavior, it stresses the student's role as a co-teacher, it has the potential for generalizing to nonschool environments, it frees the teacher for other tasks, and it teaches the student responsibility (Frith & Armstrong, 1986).

According to Epps, Thompson, and Lane (1985) and Firth and Armstrong (1986), some important strategies and things to consider when teaching students to observe and record their own behavior are:

1. The teacher needs to set up the data collection system and operationally define the target behavior. The more precisely the behavior is defined, the more likely it will be that the student is able to record it.

2. Keep the recording system as simple as possible (e.g. marking an "X" on a grid sheet attached to the student's desk, using a wrist counter, dropping a token in a box, etc.).
3. It is a good idea for the teacher to try the system first to make sure that it is a manageable system.
4. Use specific, predetermined time limits. Students who are just learning to self-monitor will be more accurate during short periods of time rather than indefinite or lengthy time periods.
5. Teach the student how to use the system and allow them time to practice when it "doesn't count." It can also be helpful to have students monitor (observe, tally, and maintain a chart or graph) behavior of the teacher or another student before monitoring their own behavior.
6. Make sure the student has the skills to perform the task he is monitoring. Self-monitoring during the skill acquisition stage may be very frustrating.
7. Provide reinforcement for accurate monitoring.

Self-Evaluation

Self-evaluation involves the student comparing his behavior to an established personal or predetermined standard. Since it involves making a judgment about that performance relative to a subjective standard or criterion it can be a very difficult process for the student. If the student has maintained concrete data in the form of records, charts, or graphs during the self-monitoring stage then self-evaluation becomes much easier.

Self-evaluation skills can be taught through the use of a "How Did I Do Today" chart where the student's behavior is rated on a scale of 1-5. A rating of 1 indicated "not so good" and a rating of 5 indicates "super extra special." The self-evaluation chart is used first by the teacher, then by both the student and the teacher, and finally by the student alone. The teacher should provide specific feedback and a thorough explanation as to why the particular rating was chosen during the first two steps (Kendall & Braswell, 1985).

Self-evaluation can also serve as the basis for determining the degree of self-reinforcement and is therefore a very important middle step in the self-regulation process (Glenn, Rueda, & Rutherford, 1984).

Self-Reinforcement

Self-reinforcement is the process in which the student determines the amount of reinforcement he will receive based upon the performance and the evaluation of that performance. When using self-reinforcement with a student it is important to remember to:

1. Make sure that the student records or administers the reinforcement himself (e.g. writes down own point earnings, puts chips in a box, marks stars on a chart, etc.). This will help to reinforce the idea that the student is in charge and also that the student is in control of his own behavior.
2. Let the student decide how much reinforcement should be awarded. It will be important to make sure there is a stringent performance standard for selecting the amount of reinforcement. Students should then be reinforced for applying the performance standard.
3. Allow the students opportunities to practice self-reinforcement with feedback from the teacher.
4. Fade out the teacher's involvement as soon as possible and avoid over-monitoring the process.
5. Encourage the student to self-reinforcers. This may need to follow the same process of development as other verbal mediation strategies by beginning with overt verbal statements ("Hey, I really improved!") and written reinforcers (Great! Super work!), then fading to covert self-reinforcing statements. (Epps et al., 1985)

Role-Playing

Role-playing refers to providing students an opportunity to act out behaviors. It is difficult to talk about role-playing separate from other behavior change interventions because it is usually recommended in conjunction with problem-solving techniques, self-instruction training, verbal mediation, and social skills instruction. However, there are several factors to consider when planning and implementing role-play groups which merit discussion in this section.

Role-playing has been found to be an effective technique for two different areas related to teaching students self-control: (1) providing opportunities to adopt alternative perspectives; and (2) behavior rehearsal of new skills. A general guideline to consider when using role playing for either purpose is that it is usually best to precede using "real" problem situations with hypothetical situations until all the members of the group are comfortable with the role-play format.

Perspective Taking (role-taking)

Mead (1934) suggested that practice at role-taking leads to social sensitivity, the emergence of the self-concept, and self-control. It has also been stated (Little & Kendall, 1979) that self-control develops as a child learns to relate his behavior to the needs of others. Studies in the development of perspective-taking seem to indicate that "role-taking ability, like other skills of living, is a learned phenomenon that occurs through interaction with the environment" (Little & Kendall, 1979, p. 95). Allen, Chinsky, Larcen, Lochman, and Selinger (1976) recommended greater use of role-playing and behavioral rehearsal to enhance implementation of the problem-solving strategies and self-verbalization critical to role taking. Factors to enhance role-playing as a strategy to develop perspective-taking ability would be the same as the factors discussed in the next section.

Behavior Rehearsal

Role-playing can be an excellent tool for allowing students to practice newly learned self-control strategies and skills. It will help the student feel more comfortable and confident in his ability to use the skill as well as enhance the probability that the skill will generalize to new settings. Bandura (1976) stated that most competencies are acquired and perfected by exposure to instructive examples and reinforced practice. Goldstein, Sprafkin, Gershaw, and Klein (1980) suggest that the following factors will serve to enhance role-playing:

1. Allow the student to choose whether or not to participate in the role-playing session.
2. Select skills for role-playing that are relevant to the student's needs.
3. Provide feedback and discussion related to the performance of all the participants. It is important to allow the student to discuss what it was like to play the role. For the purpose of developing role-taking skills it would be important to let one person act out several different roles in the same situation. Videotaping followed by discussions can be a very useful technique.
4. Remain flexible and allow for improvisions.
5. Provide reinforcement for performance in the role-play.
6. Provide instructive examples of role-playing the skills. It is important for the teacher to take an active part in the role-play.
7. Use overt rehearsal of covert self-talk during role-play sessions. (Say out loud what the individual would be thinking and saying to himself when actually performing the skill.)
8. Use self-instruction during the role-play (self-prompting by saying the steps out loud, "Now I need to look him in the eye and tell him how that makes me feel.").
9. Have the student fill in the details to make the role-play as close to the real situation as possible. (Where would it be happening? Who else would be involved? What would each person be doing? How does that person usually respond?)
10. Enforce consequences for silliness or giddiness. It is important to keep the student's focus on the role-play. The teacher's attitude and comfort level will have a lot to do with the student's behavior during role-play sessions.

Behavioral Contingencies

Effective use of behavioral contingencies is vital to successful implementation of cognitive-behavioral interventions. For information regarding behavioral contingencies the reader is referred to the chapters on increasing and decreasing behaviors.

Thought-Stopping

Thought-stopping is a way of interrupting negative or annoying thoughts so that the individual has a chance to implement more rational strategies. The basic technique is extremely straightforward and operates in much the same way a sudden loud noise will interrupt your train of thought. Initially, the student is asked to concentrate on the anxiety producing thought, and after a short time, the teacher suddenly and emphatically says "stop!" After this has been repeated several times and the student reports that his thoughts were successfully interrupted or blocked, the focus of control is shifted gradually from the teacher to the student. In other words, the student is taught to emit a subvocal "stop" whenever he begins to engage in a self-defeating thought. Rimm and Masters (1974) suggest the following synopsis of the entire training sequence of thought-stopping:

1. Negative self-talk and images are discussed and the student is persuaded of their self-defeating nature.
2. The student closes his eyes and imagines the situation, verbalizing his thoughts aloud. The teacher shouts "Stop" at the beginning of the obsessive thought.

3. After repeated rehearsal of step two, the student does not say his thought aloud but signals by raising his hand when he begins the negative thoughts. The teacher overtly interrupts again.
4. The student verbalizes to himself and shouts "Stop" aloud when he begins to obsess.
5. The student verbalizes to himself and covertly shouts "Stop" at the beginning of the negative thought.
6. The teacher aids the student in developing a variety of appropriate covert assertive responses to use following the thought stopping process (i.e. "I don't have to like it but I can handle it!").
7. Immediately after the student has said "Stop" to himself he engages in an assertive statement in an emphatic loud voice.
8. Immediately after the student has said "Stop" to himself he makes the assertive response to himself.

Metacognitive Development

Metacognition is knowing how we learn, or knowing how we operate in order to achieve a goal. Metacognitive development puts us in control of ourselves and helps give us ultimate responsibility for our own lives and action. It does this because it teaches us the skill of assessing what it is that needs to be done, how we are going to accomplish it, and what it will look like when it is done—a mental picture. We must analyze, plan, and implement. We must make decisions as to what processes we will use to carry out the analyzing, planning, and implementation. We self-reinforce when we attain our goal, and give ourselves positive self-statements if we fail. This approach focuses on concern for the process, not just the product of our endeavors.

One of the constant frustrations for teachers of students with behavior disorders is that so often the teaching of content alone seems to yield such minor payoff. Time is spent, content is digested, but the knowledge retained is such a small amount in the face of vast realms of available knowledge. Given the fact of the knowledge explosion, it is efficient to focus on processes rather than product, whether the learning is academic, interpersonal, or personal. Learning self-control in specific situations does not mean that self-control will generalize to other situations. Learning the process of self-control gives us hope for generalization and a tool to be used whenever the student has need.

Meichenbaum and Asarnow (1979) give a rationale for this focus:

> Imbuing the environment with reminders to use metacognitive processes and the inclusion of more playful approaches are designed to remind both students and teachers that one objective of the educational process is for them to engage in active inferential constructive processes when listening to instructions or performing tasks. The objective is to have the children try to carry out the instructions mentally as they listen or to analyze the relationship between the stated directions and the behavioral goal. The goal is to have the child construct a mental representation of the "problem-as-solved" and to examine critically the relationship of the instructions to that representation.
>
> But such skills as forming the mental representation of "problem-as-solved" must be explicitly trained. Consider a curriculum that required children to practice the production of metacognitive skills . . . Discussion could center on the process, not just the product, of the assignment. In short, the entire study-skill process could become the focus of education. (pp. 29-30)

The authors further note that modeling procedures, behavioral rehearsal, and role-playing are strategies that could be used to teach these skills. A more detailed explanation of these strategies can be found elsewhere in this chapter.

Teaching our students the skills for employing self-control is one step. Metacognitive development goes a step further in that it fosters awareness of processes and gives practice in decision-making. Ownership of the problem and responsibility for development of a plan to solve it is then in the hands of the student.

OTHER PSYCHOEDUCATIONAL MODELS

Aggression Replacement Training

One of the most promising and intriguing self-control curriculums now being developed is Goldstein et al.'s (1986) Aggression Replacement Training (ART). Although designed for delinquents in residential centers, it is usable for public school settings also. Its target population is adolescents with self-control, social skills, and moral training deficits.

Goldstein et al. (1986) have observed that no treatment methods have been found to be completely effective. However, they refuse to accept this as true because of what they feel have been weak treatments and weak research. They have chosen a course in which research has been designed and carried out

with vigor and systematization, which is referred to as prescriptive programming.

Prescriptive programming is based on the belief that effective programming is differential programming, and means that different youngsters will respond to different change methods. The three components of Aggression Replacement Training (social-cognitive skills, anger control, and moral reasoning) were chosen because of an overriding belief that it was these three core deficiencies to which we should optimally respond.

ART consists of three coordinated interventions: STRUCTURED LEARNING which is a set of procedures designed to enhance prosocial skill levels; ANGER CONTROL TRAINING, which was developed by Feindler, Marriott, and Iwata (1984), teaches antisocial behavior inhibition; and MORAL EDUCATION which is a development of moral reasoning based on Kohlberg's (1969, 1973) findings. Moral reasoning has been included in the hope that once a youngster has been provided with prosocial and self-control skills, he will then choose to use these skills in a self-enhancing manner. It is the hope of the developers that this combination will yield more reliable and longer term positive outcomes than each can or has done individually. It has been found that these students, even when provided with social skills and self-control strategies, do not necessarily choose to use them. Moral training is the choice Goldstein et al. have made in the hope that it would correct this lack of will to use the skills that they now possess. Knowing how to diet does not mean that one will make use of this skill, and possessing skills for social interactions and anger control does not mean that those skills will be used without powerful motivators. ART is based on the hypothesis that moral training will internalize and provide the motivation. ART is now being tried in public elementary schools in New York and secondary schools in Iowa.

Although all parts of ART are designed to fit together and form one system for dealing with aggression, the major part dealing directly with self-control is the anger-control component. Anger behavior interferes with the use of whatever positive and constructive behavior they may possess or be taught. The purpose of the Anger Control Training program is twofold: (1) to train the student to understand the causes of anger and aggressive acting out, and (2) to teach techniques that they might use to reduce their anger and aggression.

The program consists of 10 one-hour weekly sessions using trainers who are well versed in the techniques and able to apply and model them in their own lives. It consists of modeling, role-playing, performance feedback, and managing problem behaviors.

In the 1st week the trainer explains how greater self-control means greater personal power. Rules and procedures are explained as well as the three steps of the conflict situation. A brief review is given at the end. Week 2 contains a review of the first session, the hassle log is introduced, and the anger reducers are taught. Week 3 involves a discussion of the triggers, role-playing and reviewing.

Every week contains reviews of the previous week and the new material of that day. Week 4 also introduces reminders, models using reminders, and makes use of role-playing. Self-evaluation and role-playing are used in the 5th week. Thinking ahead, role-playing "If then" and role-playing the anger chain are part of the 6th week. Week 7 focuses on the angry behavior cycle and weeks 8 and 9 focus on rehearsal of the full sequence. Week 10 is an overall review.

At the end of the 10 weeks, the trainer reinforces the group to let them know that they now have choices in times when they previously resorted to aggression. In order to help them to more frequently use other choices than aggression, moral training is given. The moral training component is based on Kohlberg's six stages and involves at least three conditions that are believed to enhance moral reasoning, role-taking, cognitive conflict, and exposure to the next higher stage of reasoning.

Moral education through dilemma discussion groups is the method used and the groups have two major goals: (1) to increase the moral reasoning stage of the adolescent, and (2) to help the adolescent use these new reasoning skills. The manual contains a whole series of dilemmas to be used and the steps to be used in facilitating the discussion groups.

It is the intent of the authors of Aggression Replacement Training that structured learning, anger control, and moral training be used in conjunction with each other in order to enhance the possibility of the students making the choices to use these in their lives.

Think Aloud

The Think Aloud program (Camp & Bash, 1985) is designed to achieve verbal mediation training in cognitive and social problem solving by combining the programs of Meichenbaum and Goodman (1971) for training impulsive children to talk to themselves and the program of Spivack and Shure (1974) for training children to verbalize plans, solutions, and consequences in social problem situations. Teacher ratings of students' proficiency in using the cognitive strategies and social problem solving skills in the classroom were taken before and after use of the program during studies to evaluate its effectiveness. In all trials there was a highly significant gain in ratings (Camp & Bash, 1985).

The material has been designed for use by regular elementary school teachers with their whole class; however, the materials are also easily adapted for use by teachers and therapists working with smaller groups and special populations. The original program was developed for aggressive boys between the ages of six and eight years and has now been revised for use by students in first through sixth grades. It can also provide an excellent program for children with learning or behavior problems. Based on earlier studies the program is very effective for students who are impulsive, who tend to respond without adequately thinking through the consequences of their actions, who lack a sense of cause and effect, or lack a repertory of alternative ways of thinking about problems, solutions, or consequences.

Think Aloud is published in three volumes. The first volume is for first and second grades, the second volume is for third and fourth grades, and the third volume is for fifth and sixth grades. Each volume costs approximately $35.00. These materials can be ordered from:

Research Press
2612 North Mattis Avenue
Champaign, Illinois 61821.

Stress Inoculation Training

Stress Inoculation Training (SIT) is one of several cognitive behavioral treatment procedures that has emerged in the last few years. The SIT concept was originally proposed as an approach applied to problems of anxiety by Meichenbaum (1975) then extended to anger control (Novaco, 1977a, 1977b) and has further been proposed as a preventive strategy (Meichenbaum & Novaco, 1978). Meichenbaum (1985) cites a large number of studies, conducted by psychologists or other mental health professionals, that indicate successful results using SIT with such varied populations as: adults and adolescents with anger control problems, test anxiety, interpersonal and dating anxiety, performance anxiety, anxiety over transition to high school, multiple phobias, prevention of fears in children and adults, general stress reactions, medical and health related problems, pain and stress victims, professional groups, victims of rape, and victims of terrorist attack.

SIT is not a single technique. The procedure combines elements of cognitive restructuring, problem solving, relaxation training, behavioral and imaginal rehearsal, self-monitoring, self-instruction, self-reinforcement, and efforts at environmental change. It is based on a proactive model and designed to nurture and develop coping skills that will not only help resolve immediate problems but also help individuals deal with future stressful situations. According to Meichenbaum (1985), SIT is specifically designed to:

1. Teach individuals the transactional nature of stress and coping.
2. Train individuals to self-monitor maladaptive thoughts, images, feelings, and behaviors.
3. Train individuals to problem solve.
4. Model and rehearse direct action, emotion-regulation, and self-control of coping skills.
5. Teach individuals how to use maladaptive responses as cues to implement their coping skills.
6. Offer practice in imaginal and behavior rehearsal and to nurture individual's confidence in utilizing their coping repertoires.
7. Help individuals acquire sufficient knowledge, self-understanding, and coping skills for handling (un)expected stressful situations.

The procedure of stress inoculation training consists of three training phases: conceptualization, skills acquisition and rehearsal, and application and follow through. The first phase focuses on establishing a relationship with the trainee and developing an understanding of the nature of stress and its effect on personal behavior. During the second phase the trainee rehearses a variety of behavioral and cognitive coping skills and in the third phase emphasis is on extended practice and relapse prevention.

In discussing any type of stress management program, it is necessary to emphasize the importance of the trainer-trainee relationship in mediating behavior change. Recent studies (Waterhouse & Strupp, 1984) have indicated that the quality of the trainer-trainee relationship and the trainer's ability to build

rapport, convey a sense of "I am in this with you," and establish a collaborative working relationship, all facilitated change and were important predictors of outcome. When the trainee felt accepted, understood, and liked by the trainer, the instruction tended to be more successful.

SIT focuses on the importance of the trainer-trainee relationship and provides a variety of suggestions to the trainer for establishing an atmosphere of mutual trust as an initial step in the conceptualization phase. Other aspects of the conceptualization phase include: the clinical interview, imagery based recall, self-monitoring, behavioral assessments, and psychological testing.

The second phase of SIT, skill acquisition and rehearsal, is designed to help the trainees develop a variety of intrapersonal and interpersonal coping skills. The specific training techniques in this phase include relaxation training, cognitive restructuring procedures, problem solving, and self-instructional training. As each training technique is described, Meichenbaum stresses the need to individually tailor the training to both the demands of specific situations and the capabilities of the trainee.

The objectives of the third phase of SIT training, application and follow through, are to encourage the trainees to implement coping responses in day-to-day situations and to maximize chances of generalized change. Such techniques as imagery, behavioral rehearsal, modeling, role playing, and graduated in via practice are included in this phase. Relapse prevention is also discussed in this phase and the importance of SIT trainers providing opportunities for trainees to anticipate failures and setbacks and rehearse how they will respond to these lapses is emphasized. Students must maintain a sense of self-efficacy and develop resilience in order to "get back on track" after setbacks. Planning these types of rehearsal sessions can facilitate the development of resilience but must be done in a careful manner to avoid conveying an expectancy for failure.

In order to extend SIT training into the future, follow-up and booster sessions are suggested at 3, 6, and 12-month intervals. A part of follow-up could also include parent training sessions, teacher training sessions, training related to vocational and work experiences, and building stress management programs into the broader school curriculum as an ongoing stress reduction program.

One of the strengths of SIT is its flexibility and capability of being applied by various levels of professionals and paraprofessionals. It is also important with other types of interventions. SIT is not a panacea, it is designed to be a part of an overall therapy regimen, to supplement and enhance a wide range of other, individually prescribed interventions.

For a complete overview and conceptual model of SIT as well as detailed descriptions of each phase and specific applications, the reader is referred to the book Stress Inoculation Training (Meichenbaum, 1985).

STRESS MANAGEMENT TRAINING

Effects of undue and extended periods of stress have been widely published in recent years. The physiological changes caused by the stress response have related stress to such illnesses as ulcers, diarrhea, constipation, colitis, gastritis, cardiovascular problems, heart attacks, headaches, abnormal blood pressure, substance abuse, cancer, and many others. Children who are experiencing stress may have difficulty concentrating, get poor grades in school, have trouble interacting, be hyperactive, have trouble with aggression and self-control, experience school phobias and school burnout, withdraw socially, and in some cases, attempt suicide.

Stress management training is an educational process during which the learner increases his ability to voluntarily regulate psycho-physiological changes. It is important to realize that we are talking about learning critical new skills, and like other skill acquisition areas, practice is the most important ingredient.

The overall goal of stress management training is to be able to voluntarily regulate one's thoughts and body at any time and any place. This type of self-management requires two essential skills: (1) the ability to sense subtle changes as they take place inside the body; and (2) the ability to alter these changes to a more appropriate level for efficient and effective functioning (Lowenstein, 1983). Therefore, training involves both psychological and physiological changes with a person's body being an important key in one's ability to effect psychological changes. Lowenstein (1983) states that "stress management training is far more impactful than methods which advocate merely thinking positively. For through the body's sensory system we are both able to effect change and to monitor the extent to which change has occurred. Thus the body is both the means to and the feedback mechanism for psychological change" (p. 12).

The two areas of stress management that have particular relevance for educational purposes and will be discussed in this section are relaxation training and imagery. These procedures and suggestions may not be appropriate for some children with physical problems. If a child has known medical problems

(particularly epilepsy and diabetes) or is on medication for depression, hyperactivity, or heart conditions, it would be important to consult with the child's physician before administering these techniques.

Relaxation Training

Educators generally agree that the ability to relax and concentrate are two very significant and important skills related to academic growth, productivity, task commitment, and self-control. Significant improvements have been seen in studies done using EMG biofeedback and relaxation training in conjunction with other cognitive mediating approaches for reduction of muscle tension, hyperactivity, distractability, impulsivity, aggressiveness, irritability, and many other physiological conditions (Kendall & Hollon, 1979).

A wide range of procedures have been used to teach relaxation and no single approach appears to be more beneficial than any other approach (Meichenbaum, 1985). There is a multitude of specific treatment and training manuals, relaxation audio tapes, and student centered learning materials available and they will not be reproduced in this section. Rather, we will attempt to discuss a few helpful guidelines for conducting relaxation training.

It is helpful to understand some of the different training approaches discussed in various manuals. Progressive relaxation usually refers to a tense/release method of relaxation where the learner tightens a particular muscle to a high level of tension and focuses on the feeling of tension. After quickly releasing it, the learner is asked to focus on the contrast as the muscle lengthens and expands. Self-directed relaxation encourages creating or recalling the feeling of warmth and heaviness in different external parts of the body and becoming increasingly aware of internal sensations. Self-directed relaxation is the style of Benson's (1975) Relaxation Response which uses repetitious words and phrases to encourage relaxation. Spatial relaxation is an exercise which consists of imagining spaces or becoming aware of the volume that exists between two points both inside and outside the body. Guided imagery is a creative daydream which focuses on creating a variety of sensory perceptions. And finally, breathing relaxation emphasizes the quality and functioning of one's breathing and encourages relaxation through steady and deep breathing exercises.

Several studies suggest that young people respond best to progressive relaxation training (tense/quick release) because of the opportunity to experience the contrast between tension and relaxation. They believe this comparison makes it easier for them to replicate the relaxed state and become more aware of tension as it arises in their bodies. Other models advocate training students in all the above mentioned techniques so that individuals may select the style that is most comfortable for them. Regardless of the approach used, the critical element in relaxation training is daily practice.

Lowenstein (1983) offers these suggestions for facilitating training others to relax:

1. The most important factor in training others is that you have trained yourself and are able to manage your own stress.
2. It is important to have a quiet and undisturbed environment during practice sessions.
3. Allow time for the students to discuss their experiences during the relaxation training exercises.
4. Allow for frequent practice sessions.
5. Maintain visual feedback (charts, graphs, etc.) for students to monitor their own progress. This can be done easily when using temperature trainers or EMG biofeedback instruments.
6. Structure small group training sessions. One-to-one training is more intimate and eliminates self-conscious feelings during initial attempts when it can be arranged with a paraprofessional, volunteer, school nurse, or other support staff member.
7. Reinforce efforts during all sessions.

We have found it helpful to precede relaxation training with an instructional unit which increases students' awareness of their ability to control internal bodily functions. A unit on the heart which includes activities such as students monitoring their heart recovery rates after exercise with and without deep breathing exercises has helped to set the stage for the emphasis on self-control of internal functions during relaxation training.

Biofeedback instruments can play a key role in relaxation training. These instruments provide accurate, instantaneous, and precise feedback and are highly motivating to students. The immediate feedback is an important element of the learning process and speeds skill acquisition because the person is able to see and/or hear how he/she is doing at all times. EMG biofeedback and temperature training instruments seem to be most accurate and can be obtained relatively inexpensively. These units are quite portable and durable and they can be operated by teachers and even children with relatively little training. One source for purchasing this equipment, as well as excellent training manuals and a wide range of other

materials is:

Dr. Tim Lowenstein
Conscious Living Foundation
P.O. Box 520
Manhattan, Kansas 66502
913/539-2449

Imagery

Imagery is a process in which a person visualizes an object, event, or situation in his mind. It has become an exciting phenomenon in the field of education as a means of exposing students to the creative process. It is also becoming a widely used technique for rehearsing coping skills and enhancing generalization.

The student, while relaxed, imagines coping successfully with threatening situations. These can be either interpersonal or intrapersonal experiences. The important factor is that the individual actually sees himself being successful, using training techniques, and feeling good during the experience. There are three important elements of an image: a visual representation, a somantic experience (positive or negative feelings), and an element of meaning (a new perspective or emotional feeling). For imagery to be successful it is important that each of these elements be incorporated into the experience.

Bagley and Hess (1984) further note four main conditions which highlight the imagery process:

1. Identify (acquire a mental picture for the mind's eye),
2. Relax (relaxation allows the student to concentrate and focus),
3. Acceptance (it is important not to fight or evaluate the images),
4. Concentration (the stronger the concentration the more vivid the image).

It is also important to create a non-judgmental, supportive climate within the classroom in order to foster creativity.

Some resources for further information regarding the use of imagery and its application to educational programs are listed below:

American Imagery Conference
% Brandon House
P.O. Box 240
Bronx, NY 10471

Department of Education
Psychology
University of Georgia
Athens, Georgia 30602

Department of Education
Psychology
California State University
Los Angeles, CA 90058

Gifted & Creative Education
% Graduate School
College of New Rochelle
New Rochelle, NY 10801

Journal of Mental Imagery
Brandon House
P.O. Box 240
Bronx, NY 10471

Department of Creative Studies
State University College at
Buffalo
1300 Elmwood Avenue
Chase Hall
Buffalo, NY 14222

Department of Psychology
University of Illinois at Chicago
Circle
Chicago, IL

Department of Educational
Psychology
Mississippi State University
Mississippi 39762

Center for Integrative Learning
767 Gladys Avenue
Long Beach, CA 90804

Superlearning Inc.
450 Seventh Avenue, Suite 500
New York, NY 10123

IMAGE (Institute for Maximizing
Affective Growth in Education)
P.O. Box 612
Portland, PA 18351

SUMMARY

It is difficult to talk about self-control strategies in isolation when the effectiveness of their use depends upon the interrelatedness of the techniques and the prescriptive approach to implementation. However, in an attempt to establish statewide standards for programming for students with behavior disorders, it should be obvious that a plan for teaching students self-control with both short and long term goals should be an integral part of every program.

Developing the ability to direct and manage personal action is an evolutionary process in which we are all engaged. As change agents for students it is important for us to be constantly evaluating our

own progression in developing self-control. For only by taking responsibility for personal growth and through instructive modeling will we be able to foster this growth in our students. Finding effective techniques that we believe in and are comfortable with and matching them to individual students' needs will increase the probability we will be effective facilitators for helping students gain more control of their lives.

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The Iowa Program Standards For Interventions In Behavioral Disorders

SECTION FOUR:

ACADEMIC OR FUNCTIONAL SKILL DEVELOPMENT

Chapter 9: ALTERNATIVE ACADEMIC INSTRUCTION

Chapter 10: FUNCTIONAL SKILL DEVELOPMENT

Chapter 9

ALTERNATIVE ACADEMIC INSTRUCTION

Linda Fernandez, Ph.D.
Associate Principal
Harding Junior High School
Cedar Rapids, Iowa

Nancy Kodros
Project Leader - Special Education
Cedar Rapids Community Schools
Cedar Rapids, Iowa

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Chapter 9

ALTERNATIVE ACADEMIC INSTRUCTION

Linda Fernandez, Ph.D.
Nancy Kodros

Students are placed in behavioral disorders programs due to behavioral characteristics that interfere with learning. BD students display a variety of social, affective and behavioral characteristics and extreme ranges of academic achievement. The purpose of the BD placement is to remediate skills deficits in all four areas. Thus, we focus our attention on modifying behavior to levels at which learning may occur in social, affective and academic areas. These areas are not mutually exclusive. Behavioral, social, and affective deficiencies may have been exacerbated by poor academic achievement. Conversely, behavioral problems may have contributed to limited academic progress. Regardless of cause and effect relationships, we are responsible for provision of academic instruction to remediate skills deficits and/or provide instruction to maintain and increase academic progress.

Methods used in providing academic instruction must include and reflect goals in behavioral, social, and affective areas for individual students. Academic instruction appropriately presented can become therapeutic, providing success where there has previously been a frustrating lack of success. Inappropriately provided instruction or lack of instruction can be a detriment to student progress in all areas of BD services. Since a goal of special programming for the BD student is the ultimate return of the student to regular education services, academic instruction must be provided such that a student can be successfully reintegrated when behavioral gains permit the student to meet the behavioral expectations of the regular education classroom. If academic levels are not commensurate with those expected in the regular education program, the BD student has limited opportunities for successful reintegration.

Academic instruction is not narrowly defined for our purposes. We include in academic instruction those areas commonly called functional skills. For the purpose of this chapter functional skills are defined as those skills needed for everyday activities. These may include how to initiate conversation, budget money, find a job lead using the newspaper, or correctly paraphrase directions given on the job. The current curricula of most school districts build functional skills as concomitant objectives into their regular programming. BD students often do not acquire functional skills by virtue of their deficiencies in social, affective and behavioral areas and lack of success with the independent acquisition and application of basic skills to daily life activities. They do not automatically associate discrete classroom skills with daily living skills. Therefore, functional skills are considered a part of academic content for our purposes with the primary difference being in the application and generalization steps of instruction.

Acknowledging that academic instruction is an integral part of BD programming, academic assessment is the first step toward the development of effective structured academic instruction.

ASSESSMENT

The Iowa Assessment Model in Behavioral Disorders: A Training Manual (Wood, Smith, & Grimes, 1985) is a comprehensive presentation of how to gather and evaluate behavioral data. However, as noted earlier, the BD classroom must be more than behavior management. It is also an academic setting where content and functional skills instruction takes place. Academics are an integral part of the BD program. Healthy emotions and appropriate behaviors are a by-product of success in academics (Gallagher, 1979). Just as it is critical to assess behavior and record baselines to objectively measure behavioral change, so must academics be assessed.

There are a variety of formal and informal assessment tools available. For detailed analysis of formal assessments, the reader is directed to Assessment in Special and Remedial Education by Salvia and Ysseldyke (1981). It should be noted that formal assessment tools are much less preferred to informal curriculum-based assessment, or CBA (Zigmond & Miller, 1986). There are numerous reasons why this is true. First, standardized tests do not correspond well with curriculum programs used in schools (Gickling & Thompson, 1985). Second, the primary goal of CBA is "to facilitate the instructional decision-making process" (Gickling & Thompson, 1985, p. 206). Zigmond and Miller (1986) report that CBA offers the teacher greater flexibility since the teacher can select multiple formats ranging from observation and interview to more standard test formats. CBA is designed to focus on student entry level skills and instructional demands. It allows the instructor to judge which elements of the curriculum may become

obstacles to student learning (Gickling & Thompson, 1985).

By using CBA the teacher is better able to match student ability and instructional tasks (Tucker, 1985), thus decreasing the likelihood of student frustration and resultant inappropriate behavior. By utilizing CBA the teacher has taken a necessary pre-step in determining when a BD student will be ready for reintegration by ensuring that the student has progressed through and has mastery of a curriculum that is similar in skill mastery and content to that of regular education peers. BD teachers need to remember that "the essential measure of success in education is the student's progress in the curriculum of the local school" (Tucker, 1985, p. 199).

CBA can also be a means to enhance students' school related behaviors. When instructional tasks are appropriate, then task completion, comprehension and on-task behaviors increase (Gickling & Thompson, 1985). Daily task success is an antecedent to appropriate behavior.

Classroom assessment should not be viewed as a single act. Instead it must be seen as an on-going, continuous process. Initial assessment information is used to indicate areas of instructional need and where instruction should begin. Following instruction, re-assessment is needed so that the teacher can make the next set of instructional decisions. Thus assessment becomes an essential component in an instructional program (Stephens, Hartman, & Lucas, 1978).

There are a variety of materials that can be employed by the BD teacher to facilitate the assessment process. Most elementary basal reading and math programs provide placement guidelines. The scope and sequence charts of the texts will list skills taught. The BD teacher should also examine materials at least two years below and two years above the student's level in order to have a better understanding of when skills and concepts are introduced and how frequently they are practiced. This review will give the BD teacher a better grasp of how the skills and concepts are integrated throughout the curriculum.

At the secondary level there is movement away from discrete skills instruction and a greater emphasis is placed upon integration of skills and content mastery. Assessment must be modified to take this into account. Discrete skills in the areas of reading, written expression, mathematics and other areas can still be assessed, but additional attention needs to be given to skills often referred to as study skills such as note taking or outlining. These are skills usually acquired somewhat independently by regular class students but must be taught directly to BD students. In many cases the content goals of various courses within disciplines are only minimally related to each other. Thus the assessments conducted in these areas must be more course and content specific. Basal texts that are sequenced from year to year are not often utilized, substituting instead, separate tests from numerous publishers. However, these texts usually provide a scope and sequence which can be used when designing assessment.

To summarize, assessment is an essential component in all instruction. It should be based upon what is taught and the information gathered should be used to make instructional decisions. Assessment can take a multitude of forms, but the essential elements are (a) that the assessment tool accurately reflect the skills and content taught, and (b) that the students are assessed in a manner similar to how they are expected to use skills and content. At the secondary level with the non-sequential nature of many course offerings, assessment needs to reflect both content and skill acquisition for a variety of subjects.

For further information on how to construct curriculum-based assessments the reader is referred to Gallagher (1979) and Stephens, Hartman, and Lucas (1978).

DECISION POINTS

Armed with assessment data on which to base academic instructional programming, we come to two decision points: (a) what to teach, and (b) how to teach. The remainder of this chapter will focus on the selection of instructional content and methods of delivering instruction.

The first consideration in planning what to teach is the district curriculum. The district curriculum consists of the goals and objectives that the school district has determined to be necessary for its students to master at defined stages and levels during their public education. It is a reflection of the learning that is considered necessary in order for students to become productive members of their community. The district curriculum is the basis for measuring student progress. Therefore, the progress of special education students will, at some point in time, be compared to that expected by the regular curriculum. BD teachers must be cognizant of the requirements of the regular curriculum in order to make informed decisions in planning their instruction to meet the needs of their students.

The resources available to the program are the second consideration in planning what to teach. There are some constraints placed on instruction due to limitations of personnel, space, materials and equipment. The resources available to the BD teacher will influence the extent and effectiveness of the content delivered.

For example, if a secondary careers curriculum includes work-side skills and knowledges, the absence of a work experience instructor will impede monitoring of those objectives. An elementary reading curriculum based on use of the regular education basal reading text will be adversely influenced if the basal texts are not available to the BD program. The presence or absence of a paraprofessional in the BD classroom will influence the amount of individualized academic instruction that can be provided.

Teachers of behavior disordered students receive little preparation for content instruction in pre-service education (Pugach, 1987). Therefore, BD teachers may depend on materials and resources more than teachers who were trained initially in content areas. Availability of resources may have a tremendous impact on the content they teach. Academic content materials will positively or negatively influence the extent to which instruction matches that required by the curriculum. Thus, in planning what to teach, a thorough inventory of resources and materials is necessary in order to plan around deficiencies and capitalize on strengths.

The third consideration in determining what to teach lies in the student's relation to the curriculum. The first two points (district curriculum and resources) apply to decisions in terms of a program of instruction. This final consideration applies more to the individual student or groups of students. Any BD classroom may contain students who range from grade level or above achievement to extremely deficient. It is obviously not appropriate to instruct all students in all content area subjects as indicated by the curriculum. This range of differing abilities and needs requires examination of the curriculum for instructional alternatives. Differentiating content will be necessary in order to remediate deficiencies of some students while others will be adequately served by the grade level curriculum. While there are areas of the curriculum that may be appropriately taught to all students by varying instructional methods and materials (how to teach), other curricular areas will have to be delayed until students' skills have been remediated.

After determination of what to teach, the next decision point which must be addressed is how to teach. Similar content is individualized by modifying the delivery system and/or the instructional materials. Due to the variance of student characteristics within any one program, BD teachers must have multiple delivery systems and multiple instructional materials available.

Individual student characteristics often emerge or diverge from those the student exhibits at the beginning of BD programming or the beginning of the school year. As the student receives instruction in the BD placement, a continuous cycle of instruction and evaluation will provide feedback to the teacher on the success of chosen delivery systems and materials as well as academic progress. The availability of multiple delivery systems and multiple instructional materials will facilitate an adjustment of methods to students' changing characteristics and needs.

In summary, there are two basic questions which must be addressed in order to develop a system of structured academic instruction: (a) what to teach and (b) how to teach. Based on the rationale presented above, we can now examine a step-by-step approach to implementing such a system for the behavior disorders classroom.

CURRICULUM

Our "what to teach" question is answered through curriculum-based planning. As indicated in the discussion of curriculum-based assessment, the district curriculum provides the basis on which student progress is measured. Use of the district curriculum by the BD program facilitates reintegration. Special education instruction parallels the regular curriculum thus maintaining academic progress of BD students commensurate with their peers. District curriculum use also lends accountability to student progress, teacher activities and program goals. Promotion and satisfaction of graduation requirements are more easily monitored and justified if BD classroom instruction parallels the district curriculum. Continuity in terms of vertical and horizontal articulation between grades, regular and special education programs and between schools is enhanced (Goldstein, 1986). Student movement from grade to grade or across schools is less disruptive to educational programming when articulation exists between levels, programs and schools. Reintegration, accountability, continuity and student movement issues are clarified by the use of the district curriculum as the base for planning academic instruction in the BD program.

Curriculum-based planning assumes the presence of a curriculum. There are three curriculum possibilities: a regular education K-12 curriculum, a parallel special education curriculum, or no formally approved curriculum for special education programming.

Assuming that every school district has a comprehensive K-12 curriculum developed, and that this curriculum does, in fact, reflect the educational priorities of that district, it is the starting point for any special curriculum development. The regular curriculum will not automatically lend itself to the needs

of special students. A collapsing and resequencing of the regular curriculum are necessary to achieve the goals of effectiveness and appropriateness of a special education curriculum.

If there is a parallel curriculum developed for the special education program then the task facing the BD teacher is more manageable. Instead of generating a curriculum, the BD teacher will only need to review the existing special curriculum. This review should include a survey of curriculum objectives to ensure that essential academic and non-academic skills have not been omitted. Areas that might not be adequately addressed are social skills, study skills, problem solving skills and critical thinking skills. Functional and career-vocational objectives should also be addressed through either separate courses or through the integration of these objectives within the content curriculum.

If, however, there exists no curriculum specifically designed for the special education population, then the BD teacher will need to develop one. This is not a task that can be easily accomplished nor is it completed in a short period of time. It is a task that is best approached by a team whenever possible. However, there are ways that the task can be made more manageable.

Initially, only essential curricular areas should be developed. The district curriculum and grade level competencies can be used as a core. The BD teacher should not assume that the regular curriculum as written will be appropriate. A survey of the curriculum may reveal objectives that the BD teacher does not consider essential or objectives that can be combined. The primary goal of this survey should be to determine essential components. If available, a district expert in the curricular area may be used as a resource for determining key elements. At the secondary level, courses that ensure that the student meets graduation requirements must be included. However, the scope of these courses can usually be modified to include only core objectives.

Most behavioral disorders classrooms do not contain a single grade level, but usually span at least three years; therefore, the sequence of instruction for courses such as social studies, where each grade level as a different area of emphasis, often presents a special problem. Since most BD students remain in a program for more than one year, one method of presenting key skills and content is by establishing a three-year cycle of instruction. After identifying key vocabulary, skills and concepts, the teacher can determine levels of mastery depending upon student's age and ability. At the secondary level, required courses could be rotated. For example, everyone would participate in American Studies even if it is the course usually taken by tenth graders. The next year the required eleventh grade courses in social studies might be presented. Since many secondary courses are non-sequential, the order of instruction should not put any student at an academic disadvantage. If students remain in the BD room for at least two years, they will have been instructed in a majority of the required content while limiting the number of teacher preparations and exposing them to group instruction.

It is essential that not all curricular areas be individualized. To facilitate reintegration, the BD student must learn behaviors that will permit him/her to participate successfully in group discussion and tasks since these behaviors are expected in the regular education classroom. For this reason, and in order to simplify the teacher's instructional planning, it is advantageous to group students when feasible and appropriate.

As with any instructional tool, the curriculum will never be a finished product. It must be modified in response to district changes, program changes, teacher needs and student needs. One systematic procedure for modifying the curriculum is based on the Classroom-Based Curriculum Validation Model (Gable, Hendrickson, & Mercer, 1985). This model structures decision making within the special education program using curricular analysis and microteaching as its base. Once a core BD curriculum has been developed, it is advisable to seek school board approval as a method of legitimizing the curriculum. This lends credibility to the program and clarifies program content for making graduation requirement and promotion decisions.

MATERIALS

Once the curricular requirements have been established and the course goals and objectives determined, the BD teacher must decide how those goals and objectives can best be met. Instructional materials must be selected that not only help to meet course objectives but which also provide for flexibility in presentation and student response. It should be kept in mind that materials selected should also facilitate student re-entry into regular education. If students have been instructed exclusively through individualized materials coupled with extensive teacher feedback, they will be ill-equipped to survive in the regular education setting. Thus at some point in time, the BD student must be instructed with the same or similar materials used in the regular education setting.

In a majority of school districts a basal text is used in all curricular areas. Thus, BD students should

be instructed using a basal text for at least a portion of their instructional time so that their transition to mainstream settings is facilitated. The task of the BD teacher is to select a basal text that not only helps meet course objectives, but is one that can be successfully used with BD students.

Prior to selecting an elementary basal text, the BD teacher should examine the text currently used in the district. In some cases, this text may be appropriate. Texts, especially in the areas of elementary reading and mathematics, should be reviewed for any of the following weaknesses (Carnine & Silbert, 1979; Silbert, Carnine, & Stein, 1981):

1. essential skills are not included,
2. skill sequence is inappropriate,
3. pace is too rapid to allow for skill mastery,
4. not enough or lack of variety in student responses,
5. worksheet or extra practice exercises have confusing format or inappropriate practices,
6. not enough practice on new skills to ensure mastery,
7. inappropriate or poor examples,
8. not enough practice on previously taught skills to maintain skills,
9. poor placement procedures, and
10. inadequate selection of problem solving strategies.

The authors have found that basal texts do have a number of advantages. A few of them are:

1. a consistent approach,
2. a teacher's manual that can provide useful instructional strategies,
3. support materials coordinated with the text to reinforce and extend learning,
4. placement procedures,
5. recommendations for evaluation,
6. similar to regular education, thus giving more validity to special class instruction in the eyes of the student, and
7. provides a basis from which the BD teacher can begin content instruction which is especially necessary since most BD teachers are not trained in content instruction.

The procedure for selecting a textbook in a content area encompasses many of the same considerations one would use for elementary reading and mathematics. However, some additional factors should be considered.

Of primary concern should be readability. There are numerous computer programs that can be utilized to determine readability. In some instances a district or area education agency support person may be able to determine the readability for the teacher. It should be remembered that most readability formulas take into account only sentence length and vocabulary difficulty. Concept load, complexity of content or clarity of writing are not considered. An alternative to readability formulas is the Degrees of Reading Power (DRP) evaluation. This instrument scores the readability of a text and evaluates the students' reading ability through a group or individually administered assessment. The DRP allows the teacher to compare student frustration, instruction and independence level scores with the scores of the text. Thus a text in World Studies may receive a 45 instructional level DRP score and student receive a DRP score of 25. The teacher is immediately alerted to the need to modify any instruction using that text for that student.

Other aspects of textbooks aside from readability should be examined. Often a text of a higher readability can be used if other factors are present. One area to be considered carefully is how the text deals with vocabulary. Some key questions that should be answered are: (a) Is new vocabulary carefully defined in a way that students can understand? (b) Is the rate of vocabulary introduction such that it allows for student mastery? (c) Is there any textual highlighting, such as special print, that helps to draw students' attention (Carnine & Silbert, 1979)?

Another characteristic to be examined is the chapter organization and format. A text that provides an overview of the key chapter concepts prior to the reading will help to focus student attention and provide an "anticipatory set" for learning, thus facilitating student understanding and retention.

Research has shown that many special education students are passive learners (Torgesen, 1980). If the text utilizes questions such as chapter headings, students then are provided a purpose for reading. With a purpose for reading, more information is retained. The questions can also be used as a model for the students to assist them in formulating their own questions.

The BD teacher should also determine if the text has end-of-chapter summaries. The summary is an excellent instructional tool. Not only does it serve to review key concepts, but it can also be used as

an advance organizer to preview concepts prior to instruction. By modeling pre-reading of chapter headings, summaries and key vocabulary, the teacher can teach an essential study skill for using any textbook in any settings.

Another text characteristic to be considered is the use of text questions. The BD teacher will need to decide if the questions do in fact cover key concepts and vocabulary. Questions should be related to the main ideas presented in the text and not solely used as a check on recall of details.

In areas where appropriate, such as mathematics and elementary reading, the BD teacher should carefully examine what type of practice opportunities are provided. In addition to appropriateness of practices, the frequency of practices provided for new skills and review of past skills should be evaluated. Appropriate practice is essential for new skills mastery and for maintenance of previously mastered skills.

The teacher should also consider how the information in the textbook is presented. The text should be written so that critical concepts are plainly presented. Paragraphs should be written in a way so that students can clearly understand the points as they are presented.

After the BD teacher has evaluated the text, a final factor to be considered is the adequacy of the support materials. Of primary concern is the teacher's manual. It should be well organized to facilitate instruction. There should be suggestions for introducing and reviewing key concepts. The teaching strategies included should provide alternatives for multiple student achievement levels.

In addition to the teacher's manual, workbooks, practice sheets, tests and additional skill reviews should be evaluated. These materials should provide alternative practice opportunities and they should be written in a manner that facilitates student usage. If possible, their readability should be evaluated to see if it is commensurate with that of the text.

Within the budgetary constraints that all BD teachers work, a text that can be utilized for more than one subject or course is a more cost efficient purchase. For example, a reading anthology that can be utilized to teach short stories, plays and poetry is more versatile than one that contains only stories.

Selection of a well-written text will greatly assist the BD teacher in presentation of content. However, rarely will a text and the support materials offered be sufficient to provide the instructional flexibility needed in the BD classroom. There are a host of supplemental materials on the market for every grade level and subject. The teacher could bury herself in ditto books, game boards, and computer disks. However, not all attractive packages or flyleaf promises house truly useful materials. Prior to purchasing supplemental materials, the teacher must consider a number of factors.

First, the supplemental materials should be evaluated for compatibility with the text. If vocabulary is radically different from that used to initially teach a skill or concept, then the supplemental materials may actually distract from learning by confusing the students. Second, the format of the materials must be evaluated. Supplemental materials should lend themselves to ease of student usage. Third, materials that provide alternative practice methods are superior to those which utilize the exact student response as the text. Last, as with the text, materials that can be used for more than one instructional area are preferable.

The task of the BD teacher when selecting instructional materials is a complex one. Not only must textbooks be evaluated on a multitude of factors, but so must supplemental materials. However, this evaluation will reduce limited funds being spent on inappropriate materials and will enhance the instructional options within the BD setting.

A concern of many teachers when selecting print materials is the utility of the materials with students of varying reading ability. This concern about students' ability to acquire information from a textbooks is also one that occurs when reintegration decisions are being made. There are strategies that can be utilized in both the BD and regular education settings to compensate for students' varying reading abilities when using print materials. These strategies can be implemented solely by the BD teacher or can be a team effort by the BD and regular education instructors.

A key element to textbook comprehensibility is vocabulary knowledge. To ensure that students do in fact possess the vocabulary competencies required by the text, the BD teacher needs to pre-test the students. In order to select words to be included in the pre-test, the teacher should first preview the chapter. Basic words that are essential to understanding key concepts, technical words, words with multiple meanings and polysyllabic words should all be noted (Vandervelde, 1981). The final words to be pre-tested should be selected from this initial list on the basis of one primary criterion: 'Are they essential for understanding key concepts in the unit?' If this criterion still yields a large list, then the BD teacher should use the additional criterion of the frequency of usage throughout the course.

The results of the pre-test will indicate which words need to be directly taught. An instructional goal

of two to three new words a day is more realistic and obtainable than a weekly 25-word list mastery expectation. If every BD student mastered two new words a day in four content areas, their vocabulary would increase by almost 1,500 words in a school year. Mastery can only be obtained by providing frequent practice sessions on new vocabulary and distributive practice throughout the year.

A technique which focuses on student comprehension of ideas is the use of study guides. The purpose of a study guide is to lead the student through a reading assignment. It is to help focus the student's attention on major concepts and to direct the reading process. Study guides serve a much broader purpose than end-of-chapter questions.

Study guides can be utilized before, during, and after reading. They can be designed for use by individuals or groups. Study guides can be developed in a variety of formats, lengths, type of student response, amount of teacher guidance, and level of student comprehension required, thus they can be varied depending on student needs and content demands.

The three-level study guide is designed to stimulate student thinking skills (Herber, 1978). This guide is constructed such that the student is asked to relate to the content on three different levels of comprehension. Its primary goal is to improve student comprehension of major ideas. To construct this type of guide, the BD teacher must first have in mind the key concepts of the reading and how the students can apply those concepts. Once the applications have been delineated, the BD teacher considers what informational interpretations must be made to facilitate the student reaching those applications. Finally the information needed to make valid interpretations must be identified. Only after this process can the three-level guide be constructed. The student's guide is organized from literal to application or in the reverse order of the teacher's pre-construction process. At the literal level, the questions can be written in a true/false, agree/disagree, multiple choice or fill-in-the-blank format. At the interpretive level, statements are usually written in an agree/disagree format. The students base their judgments on the literal level information. Finally, the teacher develops the application section. This might contain a number of statements from which the students choose one as a logical extension of the information contained in the first two levels. These questions may be answered either verbally or in a written response format. Methods used to complete the three-level guide may need modification depending on student ability. Some students may only be able to independently complete level one. For the other levels small group discussion may be employed.

Another type of study guide is composed of two sections. The first section contains true/false statements based on the assigned reading. The second contains a few broad concept statements. In this type of guide the student is asked to respond to the statements in section one, rewriting any false statements so that they then read true. Next, the student places all section one statements under the appropriate concept statements in section two. As with the three-level guide, this type of guide is constructed by first selecting the concepts and then identifying the information needed to support the concepts.

A third type of study guide divides the assigned reading into sections. The purpose for reading each section is explained and student responses are designed to support that purpose. Literal level recall, such as listing, classifying or categorizing information, may be used.

Study guides may also be constructed to draw students' attention to key vocabulary, details, and concepts while reducing the student reading load. The instructor previews the reading selection and notes repetitious or unnecessary material along with vocabulary and concepts. The study guide then draws the students' attention to vocabulary by the types of student responses requested. Students can be directed to skip sections or to skim others for only specific facts. If the text utilizes a cause/effect or compare/contrast format, the teacher can design sections to assist the students in dealing with this method of presentation. This type of guide usually provides more information by specifically indicating paragraphs to be read and by carefully structuring the reading.

Even though study guides can be designed in multiple formats, the primary purpose of each is to facilitate student comprehension of material presented in a textbook. This is achieved by focusing students' attention on major ideas and key vocabulary. The teacher leads them through the reading and structures responses to facilitate comprehension.

When first introducing study guides, the BD teacher should demonstrate their use to the group. Only after the students are comfortable with them, should study guides be used as an independent activity. Although this discussion focuses on study guides as a tool to modify textbooks, they can be used with alternative presentations. Study or listening guides can be designed for films, lectures, or videotapes.

Graphic organizers are another valuable tool to aid students' comprehension of vocabulary, concepts, and generalization. A graphic organizer is a diagram that shows relationships between key vocabulary

and concepts. Graphic organizers can be used with materials presented through a textbook, lecture, audio-visual presentation, or a combination of presentation formats (Bean, Sorter, Singer, & Frazee, 1986; Trager, 1984).

Initially graphic organizers should be introduced as a teacher-directed activity. A topic, phrase, sentence, or key word should be selected. The criterion for selection is that it must tie together the details of material. Next, various words or phrases that go with that topic are generated. Lines, circles, arrows, and pictures can all be used to show the various relationships between words and ideas.

Graphic organizers can be used prior to instruction to introduce the main concepts and vocabulary. They also can serve as a vehicle for review. Students can complete graphic organizers designed by the teacher or they can construct their own. The teacher might provide prompts to this student product by supplying words and ideas to be included. The graphic organizer can also be utilized as an on-going record of concepts and their relationships as they are introduced throughout the unit.

Pre-teaching vocabulary, study guides, and graphic organizers may be used in both special and regular education settings. They provide the BD teacher with an additional means of modifying instruction to improve student learning. None of the ideas presented necessitate large amounts of additional monetary resources. All are appropriate for both individual and group instruction. The flexibility of format and usage provides lesson variety without detracting from learning. The major drawback to implementation is the amount of teacher time that must be invested. Each mandates an extensive preview of content and the writing of materials. However, to off-set this negative aspect is the fact that this process will assist the teacher in identifying essential content components which will facilitate the entire instructional process.

SELECTING AN INSTRUCTIONAL DELIVERY SYSTEM

Learner Characteristics

Learner characteristics include intact enabling skills, modality strengths, effective reinforcement and attending behaviors. These factors are interrelated and change over time; therefore, it is necessary for the teacher to be well acquainted and sensitive to changing learner characteristics as they have a profound impact on the effectiveness of the instructional system being used.

Enabling Skills

Enabling skills are those skills necessary to complete an instructional task. The enabling skills for copying the alphabet are the abilities to hold a pencil, place the pencil on the paper and make the pencil strokes similar to those being copied. In order to write a theme at the secondary level, the number of enabling skills has increased to include more cognitive skills as well as following an outline, writing paragraphs, and writing neatly in ink. All instructional tasks have a set of enabling skills which learners must first be able to perform before they can complete the new instructional task. Identifying the student's skills gives the teacher a base on which to design new instructional tasks. If a learner is deficient in certain skills required for the task, either the task must be modified to compensate for the deficiencies or the enabling skills must be pre-taught. Asking a student to complete a task for which the student has not mastered the enabling skills is asking him to do a job for which he does not have the tools.

The teacher must also know what enabling skills are necessary for any instructional task. This is accomplished through a task analysis method. The teacher can either observe a student completing the task and list each enabling skill needed for task completion, or do the task herself, mindful of each thought and movement that it requires. It is necessary to carefully analyze each instructional task in order to determine the enabling skills and then use this analysis in determining if a learner has mastered the pre-skills necessary to perform the new instructional task.

Modality

Another learner characteristic that should be considered when planning instruction is modality. Although various authors have used slightly different terms to describe modalities, they basically fall into the three general categories of auditory, visual and kinesthetic. An auditory learner is one who remembers information best when it is heard. This type of learner might be good at rhyming activities, recall or stories read aloud by the teacher or of lecture material. The visual learner might be able to recall the pictures that go with the read-aloud story, immediately spot a new bulletin board, and profit from information presented through maps and graphs. The kinesthetic learner would be more likely to want to touch the book being read aloud or act out the story as it is being read. The kinesthetic learner often needs to move or touch

things and would prefer manipulatives in math instruction.

Research does not support remediation of modality weaknesses nor are there multiple studies proving that instruction aimed at a modality preference is significantly better (Arter & Jenkins, 1979). But the BD teacher should allow for modality differences when planning. This means not only varying the type of input but also varying the type of student responses required. For example, a reading or language arts class that requires book reports might allow choices of taping a summary, acting out key scenes in the book, or a written summary. For the BD teacher, the key point is to give instruction and practices that use all modalities whenever possible.

An area that has some relation to modality preference is hemisphericity. This term refers to the fact that extensive research has demonstrated that the right and left hemispheres of the brain process different types of information (Hatcher, 1983; Luvaas-Briggs, 1984). The left hemisphere is considered the hemisphere most widely utilized in the school setting. This is because the left hemisphere processes verbal information; it is logical, linear, temporal and analytic. The right hemisphere is often connected with creativity. It processes non-verbal information, is intuitive, non-rational, spatial, visual and analogic (Hunter, 1976). The two work together, but in many cases one hemisphere appears to be dominant.

Hunter (1986) has suggested a number of instructional strategies that allow information to be processed by both hemispheres. She recommends modeling since this pairs the visual input with more traditional verbal or written directions. Use of audio-visual materials is another example of pairing presentations that both hemispheres process. A teaching tool that can facilitate directing instruction to both hemispheres is the chalkboard. By saying it and then writing or diagramming it on the chalkboard, the teacher can direct learnings to both hemispheres.

The BD teacher is not expected to become a hemispheric specialist. However, when making instructional decisions the BD teacher needs to keep these learner characteristics in mind, not only to facilitate learning, but also to reduce student frustration and thus increase student interest and involvement in the learning process.

Attending

Attending behaviors encompass those skills learners use to focus on a task. The length and quality of attending by BD students are usually deficient. Some students may not be obviously inattentive, but may be inwardly focused on thoughts other than the task at hand. Regardless of the manifestation of non-attending behaviors, they must be dealt with in order to facilitate efficient learning. If attending behaviors are increased, skill learning will increase (Fisher, Berliner, Filby, Marliave, Cahen, & Deshaw, 1981).

By first familiarizing ourselves with the individual attending strengths and weaknesses of our students, we are better able to structure instruction for compensation of weak attending behaviors and concomitantly increase attending behaviors. Factors which should be examined in analyzing behaviors include selective attending (can the student play a video game for 30 minutes but attend to computer-assisted instruction for only 5 minutes?), modality areas related to attending (will a film hold her interest for its duration while a lecture receives little attention?), attention span (how long is the student able to stay on task?), and interest-related attending (a reading on a rock group is devoured while a classic short story is ignored). Variations in these areas are natural for all learners. The task of the BD teacher is to accommodate to extreme deficits in attending behaviors so that learning can take place.

There are some basic methods by which students' attending behaviors can be increased for the purpose of structured academic instruction:

1. Introduce variety into lessons. Try different methods of presenting material, modeling skills and practicing skills. Novelty increases attending behavior. Do not, however, go overboard. Extreme novelty will be an unanticipated experience at which point the students may attend more to the novelty of the method than the content intended.
2. Make information relevant to students' interest. Use their names in dictating sentences or reading assignments. Refer to cartoon characters, television and music personalities in examples, reading and written work. Select language arts reading assignments related to students' interests and math story problems relevant to their daily math needs (e.g., the cost of an album or going to a movie, gas mileage, sports statistics). Vivid examples will be more easily recalled. Make sure that references are age appropriate.
3. The pacing of verbally presented information will affect attending. The brain thinks about three times faster than words are spoken (Devine, 1981). Since the student can think faster than auditory information is presented, thought patterns can quickly diverge from the task. By providing information in short

segments and then quickly moving on to multiple examples relevant to the students, there will be less opportunity for students' thinking to diverge.

4. The teacher's voice can have a tremendous impact on students' attending behavior. Everyone has been lulled to inattentiveness by monotone speakers at some time. Varying voice tone to show excitement, emphasis, pleasure and displeasure will add meaning to the words being spoken and increase on-task listening. The loudness of voice can also affect students' listening. The same voice level maintained continuously can become just as monotonous as a never-varying voice tone. A soft voice used appropriately can force students to attend more closely. A soft-spoken presentation is often a welcome change for BD students who have learned to "turn off" loud attention-demanding voices.
5. Proximity is a gentle reminder to students. It can, however, be misinterpreted by students. Off-task behavior which is reinforced by the teacher moving closer and putting her hand on the student's shoulder can encourage inattendance. Know what is positively and negatively reinforcing to the student; know what distance is positive and what distance is negative; know which students can be touched and which cannot.
6. Actively engage students in learning. Ask questions. Solicit opinions. Have them read aloud. Have them verbally pre-organize existing knowledge before tackling new related information. The more actively involved the student is in the act of learning, the more successful he/she will be in attending. As students are engaged in learning through teacher-directed activities, instruction should take place such that attending will become their responsibility. Move gradually from external teacher control to internal student control. Unless the student becomes actively involved in learning, attending cannot become internally controlled and thus cannot be easily generalized to other settings (Lloyd, 1980).

Reinforcement

Reinforcement theory in academic programming is the same as in behavioral programming. In academic instruction, the goal is to increase learning behavior and decrease behaviors that interfere with learning. Correct responses should increase and incorrect responses should decrease. Thus, reinforcement follows the guidelines indicated in Chapters 3 and 4 of this Monograph.

Teacher Characteristics

Just as learners possess various characteristics that lend themselves to or detract from methods of learning, teachers also have strengths, weaknesses, and preferences that affect their presentation of material and selection of methods. Modality strengths, personality, and non-verbal communication are teacher characteristics that have an impact on teaching behavioral disordered students.

Most teachers do not teach in the way they have been taught, but in the way they learn (Dunn & Dunn, 1979). Are manipulatives and experiential methods, or verbal presentations, or written materials the primary modes of instruction? The use of a teacher's own modality strength is not in itself poor teaching, but may be a disservice to the student who has strengths and weaknesses different from the teacher's. Using a variety of modes of presentation, practice, and assessment for each skill taught will permit multiple opportunities for learning as well as providing each student with exposure to his/her own strength area.

Teachers have preferred formats for instruction based on their own modality preferences, what has proven effective in the past, what may be easier to prepare or monitor, and what lends itself most expeditiously to classroom materials. Teachers teach in ways in which they are comfortable. Just as teachers expect BD students to widen their repertoire of receptive and expressive skills, teachers must expand the skills and formats used to present material. As BD teachers attempt to utilize an unfamiliar method of teaching (a new set of teaching behaviors), they can gain an appreciation of the difficulties their students encounter in attempting to acquire a new set of learning behaviors.

Every teacher enters the BD classroom with certain personality traits. Each teacher needs to understand herself well enough to recognize and compensate for those personality traits that may have a negative effect on the classroom and capitalize on those traits that will enhance the classroom. Just as BD teachers soon learn what "button" will motivate or enrage their students, they need to know what their buttons are. These trigger points must be dealt with on the part of students and teachers in order to structure effective programming. BD teachers know that their students will display behaviors that fall outside of the norm of non-behavioral disordered students, but there are certain behaviors that are more disturbing than others (Safran, Safran, & Barcikowski, 1985). BD teachers must prepare themselves for facing these

behaviors daily and through proactive planning decide how the behaviors will be handled to reduce teacher tension which will in turn affect the entire class.

Related to the disturbingness of certain student behaviors is the classroom level of activity. Some teachers are able to tolerate a great deal of student movement and verbalization. Others are not. Some teachers are comfortable with student control over designated materials and resources while others need to exert more control over these areas. No one way is right or wrong. The teacher's personality is built into the classroom climate just as students' characteristics affect the climate. Being aware of how the teacher's personality is reflected in the classroom, programming and teaching will help to analyze difficulties to be ameliorated and strengths on which to build.

Non-verbal communication is an essential part of effective teaching. It can supplement the message intended, mask the intended meaning, or confuse the intended meaning with a differing message than is being verbally communicated. Hillison and Crunkilton (1983) examined the use of teacher non-verbal cues with handicapped students. They found that facial expression, eye contact, tone of voice, head nod and shake signals, proximity to students, and body orientation (where and how the teacher stands) could be effectively used to enhance instruction with emotionally disturbed students. Gestures were also examined, the effectiveness of which were largely dependent upon individual student characteristics. Non-verbal communication is a powerful supplement to communication that teachers can consciously alter in order to become more effective. All teachers need to be aware of their unconscious non-verbal habits and control those habits in order to send clear instructional messages. Having a colleague observe an instructional session or videotaping a session will aid the teacher in targeting non-verbal behaviors that should be stressed, eliminated or used in specific situations in order to enhance instruction. The objective is to use non-verbal communication positively to achieve the results and send the messages intended.

Environment

The classroom environment is the stage that is set in order to encourage learning. In addition to the physical environment (space, displays, learning centers, temperature, lighting, etc.), factors such as size of student instructional groups, length of instructional time, and mandated interruptions (recess, lunch, assemblies) must be included in a thorough structuring of the environment.

The spaces in BD classrooms must reflect the purpose the classroom is to serve. Since there are multiple purposes in the BD classroom, the arrangement and tone of areas can signify a specific purpose. For example, an area with comfortable chairs or carpeting may be conducive to affective instruction or fostering peer social interaction, but may not send the signals intended for academic instruction.

Academic instructional areas must fit individual or one-to-one instruction, small group instruction and entire class instruction. The size of the group depends upon the purpose of instruction. If new material is being introduced, large or small group instruction is appropriate and space to accommodate such a group must be available. If the space is too small to give students ample space or so large that it is impersonal, instruction will be less effective. If students are seated in rows of student desks for group instruction they are more likely to acquire and practice the teacher-pleasing behaviors expected by regular class teachers. The relative formality, yet security, of the setting signals the students that serious learning is to take place. It can hardly be expected that BD students behave appropriately in the regular class setting if they have never approximated the situation in a more controlled setting. Instruction may take place one-to-one, in student dyads or individually. Smaller, more private settings are appropriate in these situations. Behavioral disordered students will benefit from a variety of groupings for acquisition of academic content as well as concomitantly acquiring and practicing social and behavioral skills.

A second reason for differentiating spaces within the classroom is simply to expedite the instruction of more than one group at any one time. The farther groups are from each other physically, the more distractions can be minimized. A variety of spaces will accommodate BD students' modality strengths and weaknesses, learning styles and preferences in study habits. Some students may study most effectively lying on the floor while others prefer more traditional tables or desks. Use of headphones for taped music may be an effective study method for one student while others may need a study carrel to block visual distractions. Knowing students' preferences will help to structure effective study by using creative spaces in the classroom.

Wall and bulletin board spaces should reflect the purposes of the classroom. For academic purposes, displays with reminders of key concepts, vocabulary or skills steps are useful. A second practical and structuring use of wall space is an assignment board which will serve as an organizer for students and teachers. Bulletin boards are commonly used for behavior charting; similar posting of academic progress

charts, student papers or projects serve as a form of positive recognition.

Timing is crucial in teaching and learning (Hunter, 1981). Teachers focus on when skills are sequentially introduced, timing of reinforcement following a response and meeting IEP deadlines. They often overlook day-to-day time factors that can enhance or destroy well-prepared instruction. Is the school-controlled class period length ten minutes too long? Does the class fall into disorder during those ten minutes nullifying what gains had been made during the productive part of the period? Knowing how long students will effectively attend to instruction will permit pre-planning for shifts from one instructional area to another, varying methods within an instructional area, or maximizing quality instructional time while utilizing extra time productively for reinforcement, game-like review or socialization activities.

The timing of instruction within the school day is crucial. There is always a first class, a class before lunch, a class after lunch and a last class of the day. Elementary BD programs must also contend with recesses. Even shortened day programs must cope with some of these factors. Assemblies, speakers, special events, fire drills and any other interruption add to the confusion. Daily schedules can be planned taking school-mandated time allocations into consideration. What time of the day is best for students to receive instruction in reading—first thing in the morning or last class of the day? If recess or physical education tends to excite everyone, then the teacher probably doesn't want to schedule social studies right after it. Elementary programs usually use an "opening" at the beginning of each day. Secondary students as well may benefit from a short buffer period at the beginning of each school day to wind down from the night before and gear up for the school day. Planning academic instruction for prime time and allowing a transition period between activities will elicit more effective and quality learning from BD students.

Through careful structuring of space, groups and time, the BD classroom can effectively serve its multiple purposes. As an academic classroom, it must physically reflect the serious business of learning. Variations in group size and location provide opportunities for maximizing individual strengths and approximating the demands of the regular classroom. Manipulating the timing of instruction within the school day and within each class will aid in obtaining optimal student performance.

Content Area

Academic area content suffers from a stereotyped conception that certain subjects are taught through specific methods. Content tends to be identified with a specific repertoire of teacher behaviors and mandated student responses. This idea severely limits the possibilities of potential teaching and learning through a variety of methods. There are standard instructional practices that correlate with particular subjects, but seeking additional methods of instruction will extend standard practice and result in more effective teaching.

Traditionally, elementary reading is taught in small leveled groups while spelling and writing are large group activities. Secondary social studies courses are largely lecture, individual reading and perhaps a few films. Mathematics often employs manipulatives. These are traditional methods commonly associated with particular content areas. Is it not possible, however, to use manipulatives in language arts by arranging word cards to form sentences and in secondary social studies to build timelines? With wide ranges in reading levels within a class of BD students, large group instruction in reading areas such as context cues, vocabulary and main idea may be appropriate. Individualized spelling lists and instruction may be the most appropriate approach for BD students who vary tremendously in spelling skill.

Behavioral disordered students have not been successful in regular education using traditional content approaches. Alternatives will provide them with the opportunity to acquire content area material in ways that may have not been previously attempted. Evaluation of the content to be taught and the learner characteristics will provide a basis on which to select the best configuration and method of instruction. If the BD teacher has a large number and variety of options in his repertoire, he will have more flexibility in content area instruction. The BD teacher needs a variety in order to choose the best method of instruction for each skill within the content area. Thus, methods are tied more to skills and learner characteristics than to the content area.

A variety of methods will also permit the BD teacher to prepare the student for reintegration. Moving from non-traditional to more traditional methods of instruction will prepare the BD student for reintegration by building confidence and experience in the behaviors and skills expected in the regular classroom where traditional approaches are more predominant.

INSTRUCTIONAL SYSTEMS

Having answered the "what to teach" question and examined the characteristics which affect effective delivery of content instruction, the teacher must now address "how to teach." Once again using a best match process, the curriculum-based skills to be acquired can be compared to learner, teacher, environmental and content characteristics in order to select an instructional system or method that best meets defined needs. There are various methods available to deliver content. Each has merit when used appropriately, i.e., the match is accurate. Although each system could be used exclusively, more effective instruction is achieved when the method is dependent on the skill to be taught and the previously discussed characteristics. In the BD classroom, the teacher must keep in mind the applicability of methods selected to the social, affective, and behavioral goals of each student as well as the academic objectives. If a method complements the program designed for the student in all these areas, it has multiple value.

The systems described are by no means the only methods of delivering academic instruction. Combinations of methods, modifications of single systems, and creative methods observing sound instructional practice are often the most effective means of content delivery.

Direct Instruction

Direct instruction is a phrase used to denote a complex set of teacher behaviors. These behaviors have been observed in a variety of settings across grade levels and content areas (Bickel & Bickel, 1986). These teacher behaviors have been shown to increase student learning as measured by standardized tests (Brophy, 1979; Good, 1979; Schneider, 1979). What are the essential components of direct instruction? In general,these authors have agreed on the following:

1. The majority of instruction takes place in groups.
2. The learning is teacher directed.
3. The teacher selects instructional goals and materials.
4. The instructor uses demonstration and modeling.
5. Prior to utilizing a skill, there is structured student practice.
6. There is frequent elicitation of student responses focusing on the academic input.
7. Feedback to students is focused on the academic information.
8. The classroom environment and instructional lessons are designed to promote maximum time on task by students.
9. There is a high level of student involvement.
10. The teacher sets the instructional pace.

Direct instruction is effective for numerous reasons. Rosenshine and Berliner (1978) have documented that the amount of academic engaged time has a significant impact on student achievement. Frequent student response, teacher direction and use of feedback have all been found to increase student academic engaged time. In fact, academic feedback is more strongly and consistently related to achievement than any other teacher behavior (Fisher et al., 1981).

How can BD teachers translate this information into effective instructional practices within their own classrooms? One way is to purchase on-the-market materials that are designed to include all the components listed above. DISTAR, Corrective Reading, Morphographic Spelling and Monterey Math are all examples of published materials that are designed to incorporate frequent student response, group instruction, teacher-directed learning, high levels of student involvement and structured student practice. In addition, these materials incorporate carefully analyzed and sequenced skills to facilitate learning. As Silbert, Carnine and Stein (1981) state, "Sequencing from easy to difficult reduces student errors and frustration, which is a major goal of direct instruction" (p. 4).

Carnine and Silbert (1979) emphasize the need for good teacher examples, precise teacher language reduction in the amount of time a teacher talks in order to increase the amount of time a student has to respond. Because of these stated needs, many on-the-market materials provide teacher scripts. These scripts ensure that the aforementioned needs are met. In addition, the scripts include methods to elicit frequent student responses over small bits of learning. The scripts include immediate correction procedures and suggestions for pacing. Some teachers are not comfortable with a scripted lesson. The elements of direct instruction can be incorporated into any lesson. The first step prior to any instruction is assessment. Students learn best with accuracy rates of at least 80% or higher, thus assessment is essential so that instruction is initiated at the correct level of difficulty. Following assessment, the BD teacher will design the lessons. The following components should be included:

1. a clear statement of instructional objectives to focus teacher and student attention on what is to

be learned;

2. teacher model or demonstration to ensure sequence and examples are appropriate, essential steps are highlighted, and that students see and hear new skills performed accurately at the initial stage of learning;
3. frequent academically focused questions with a high proportion of questions asking requiring factual recall to ensure student attention and involvement in the lesson and to continually monitor student understanding and mastery;
4. guided practice so students maintain a high level of success as well as demonstrate skill acquisition and to give the teacher the opportunity to correct errors before the errors become ingrained;
5. elicitation of overt responses from all students to increase student accountability and on-task behavior while providing practice and a means for the teacher to monitor skill acquisition;
6. immediate correction of incorrect responses to eliminate student practice of errors and increase student accountability for correct answers;
7. independent practice focusing on skills for which students have demonstrated proficiency during group instruction to provide a means for students to demonstrate understanding and mastery and to provide distributive practice to increase retention (Carnine & Silbert, 1979).

These steps can be incorporated into any teacher lesson developed from a variety of content and basal tests. A few additional suggestions which may facilitate this process are:

1. Teachers should be sure that questions are inserted into the lessons after directions, whenever new information has been presented, and when pieces of information have been integrated. If the teacher is presenting a strategy that has several steps, questions should be used to check for mastery of the individual steps and as a new step is added to ensure that the entire sequence is learned. Teachers need to remember that the beginning and ending part of a sequence are usually the easiest to remember while the middle steps are forgotten. Therefore, the middle section of any sequence of instruction will need more questions to increase student retention.

2. When writing questions, the teacher should be sure that they are clearly stated and over small bits of information. Questions should maintain the academic focus while ensuring that all students have a way to respond.

3. Questions should be varied to maintain student attention and factual recall questions should be used frequently.

4. The questions should be structured so that simple skills are reviewed before more complex ones and that questions are phrased such that students will have to demonstrate a new skill or strategy to answer correctly.

5. To ensure that all students respond, the teacher can use unison responding or other devices such as giving student choices and having them signal (e.g., thumbs up or down) for correct and incorrect choices. When using group responding, it is best to use a teacher cue so that all students respond together. This cue can be physical (a hand movement), verbal ("ready"), or both.

6. When writing the lesson, the teacher should try to anticipate where errors might occur and plan instruction to compensate for that occurrence. Errors can be reduced by monitoring students closely to be sure that they are attending, by providing sufficient modeling, by providing adequate amounts of guided practice, and by checking for student understanding frequently.

7. When errors do occur, the teacher must be sure the student corrects the error. This can be accomplished by having the student repeat the information after a model, by breaking the task into smaller units and then reintegrating the information into the original question, or by leading the student to the correct answer through prompts. The key is to ensure that the student has guided practice until proficiency is demonstrated.

8. Independent practice must occur. This type of practice needs to be gradually spaced over time to ensure that students retain mastery. Without this distribution of practices, retention over time will not occur.

As the BD teacher writes his own direct instruction lessons to accompany a basal text, the limitations of the texts in reading and mathematics should be kept in mind. To briefly review, the limitations as noted by Carnine and Silbert (1979) are (a) omission of essential skills, (b) inappropriate sequence of skills, (c) pacing too rapid, (d) poor examples, (e) insufficient amount of practice on new skills, (f) poor strategies, and (g) insufficient amount of distributive practice.

Direct instruction is a proven teaching method. It incorporates many elements beneficial to BD students. The format and structure of the lesson ensure that students attend to instruction and respond to instruction,

thus being active learners. The fact that skill sequence is controlled and arranged in such a way as to provide for student success facilitates event he most reluctant learner experiencing success. The constant use of feedback is also a factor that will impact positively on most BD students. Additionally, the published materials keep teacher verbiage to a minimum while building in positive teacher comments. Scripts establish a non-threatening means for correction so that the opportunities for power struggle are reduced. In short, the sequencing, pacing, practice and feedback are all elements that foster positive student attitudes while increasing student learning.

The teacher who does not like scripts may incorporate direct instruction principles into his own lessons. It is a time-consuming task and the teacher may decide that the scripted published materials, while not meeting his needs, do an excellent job of meeting student needs and thus should be used. No additional classroom space is required nor are additional teaching aids needed. Thus, the direct instruction approach will fit almost any classroom environment.

Individualized Instruction

Individualized instruction is a term that encompasses a multitude of instructional formats. The basic component of each is that the student works with materials that have been selected to meet that student's educational requirements. The reading level, type of response required, length of the work session, pace of instruction, amount of praise, and format of input have been considered by the instructor. After a one-to-one instructional period with guided practice, the student is given independent practice. Individualized instruction is not solely independent seatwork nor is it learning centers or activity packets. Instruction with guided practice must take place prior to independent practice. Activity packets, learning centers, and folder activities are all excellent ways of adding variety and interest to practice, but they do not replace teacher-directed and monitored learning.

Individualized instruction can be extremely effective since it can increase student attending behavior, frequency of student response, frequency of feedback opportunities, and motivation. By definition the instruction has been tailored to fit the instructional needs of individuals so educational appropriateness is ensured.

The problem with implementing individualized instruction in the BD classroom is that it necessitates a great amount of teacher time. Unless an aide or trained peer tutors are available, the BD teacher rarely has the time to totally individualize instruction.

The BD teacher can, however, provide a wide selection of individualized practice opportunities. Packets, learning centers and games are all useful practice tools. In this way the teacher individualizes only certain aspects of the learning process, such as pace (Morris, 1978, pp. 205-210). A precautionary note is that practice activities need to be constructed and monitored to provide feedback to students.

The authors have found this instructional design to be especially effective with students who are highly distractible, withdrawn or disruptive in a group, extremely quiet, or inattentive.

To implement an individualized instructional program or simply to provide individualized independent practice, the teacher will need to have a wide range of materials that span multiple grade levels. The materials should provide options with regard to modalities used, length of practice sessions and form of student response and feedback. To facilitate the use of the number of materials required and to effectively monitor student progress, the BD teacher will need to be well-organized and have a well-planned method for material storage and retrieval.

Prior to implementing an individualized instruction program, the BD teacher needs to be aware that considerable research supports group instruction as being more effective than highly individualized instruction (Fisher et al., 1981; Stevens & Rosenshine, 1981). Additionally many social skills can be concomitantly acquired in a group instructional setting, an opportunity not available through individualized instruction. Individualized instruction is not commonly used in regular education classroom instruction and thus has limited value in transferring to reintegration skills. Used appropriately, it can provide valuable practice time, but must be balanced with other instructional strategies in order to best serve BD students.

Programmed Instruction

Programmed instruction is a particular type of individualized instruction. Due to the proliferation of programmed instructional materials commercially available, this instructional system merits discussion.

Programmed instruction materials are differentiated from other individualized instruction systems and materials in that they are intended for independent use by students. Many programs include a teacher's manual which delineates certain teacher roles such as introduction of the skill and structuring of initial

practice. Skills are sequenced and broken into small discrete steps. A skill is introduced to the student by the materials or teacher, practiced with a built-in self-checking component, and generally assessed before the student moves on to the next skill. Programmed instruction is self-pacing as the student moves as slowly or as quickly through the materials as his/her skill acquisition allows.

Learners for whom programmed instruction is most effective are those who work best independently, need structure, and are motivated, persistent and visual learners (Dunn & Dunn, 1979). It is vital to assess if the BD student has the enabling skills necessary to use the materials independently. If the student does not have the skills but the materials are attempted, he/she will become frustrated with the process without ever getting to the content. The BD student may react by refusing to attempt tasks in the subject area and/or further programmed instruction processes. If the student doesn't have the enabling skills to be successful with the process, the BD teacher can modify the materials. This may be useful, but it does somewhat defeat the purpose of a commercial programmed instruction product.

The feedback provided by programmed instruction is immediate. If responses are correct, the student is allowed to proceed which may in itself be motivating to some students. If responses are incorrect, motivation may decrease or disappear. Frequently a student who is "learning shy" will benefit from the reinforcement provided by the immediate feedback when he/she is placed in programmed instruction materials that are below his/her instructional level. Working successfully through materials gradually approaching instructional level will increase self-confidence to levels more conducive to attempting new instructional level learning.

Behavioral disordered students with a fear of failure may have difficulty using programmed instruction appropriately. Due to their fear of being wrong and desperate need to be right, they may be tempted to use the self-checking answers before they have actually responded: they may cheat. This obviously defeats the purpose of instruction since students are not acquiring the content intended, but are learning only a new way to manipulate the process. This simply validates their belief that they are unable to do it correctly. Removing the answers and closely monitoring student activity for opportunities to praise correct responses and use of the process will alleviate this problem.

Many BD students measure their success by the number of pages completed. This holds true for these students in materials such as textbooks, workbooks, worksheets, writing assignments, recreational reading and programmed instruction. Students with this mind-set will work productively through programmed instruction materials. The number of pages completed will be reinforcing to them.

The BD teacher can supplement the reinforcement system built into these materials by giving recognition for the number of practices attempted and number correct; charting results with the learner; using tangible reinforcers (e.g., starts); awarding points to be accumulated to trade for tangibles or privileges.

The teacher is not freed from instructional responsibility by using programmed instruction. She must be able to encourage independent student behaviors and, once they are developed, permit continued independence. The teacher must, therefore, be prepared to respond judiciously when the learner accustomed to programmed instruction wants to opt out of group instruction. She must have a plan prepared to wean the learner away from programmed instruction to instruction more closely approximating that in the regular classroom. In addition to process issues, the teacher must maintain instructional responsibility by introducing the skill, checking skill acquisition before independent practice, reviewing skills that have been acquired at intervals to ensure retention, organizing the concepts related to skills so that students are able to see on what the skills have been built and where the acquisition of these skills will lead.

Environmental needs for use of programmed instruction include an individual space for the student to work and an area in which to store materials. The individual space should be away from general classroom activity and fairly free of distractions. The teacher should be able to see the student from various vantage points throughout the classroom in order to monitor student activity. Storage connected to the individual work space creates a learning center type atmosphere. Materials, including charting if used, should be easily accessible to the student and located to reduce the amount of time necessary to retrieve materials and start work.

Content areas which are most suitable for programmed instruction are those which require concrete, black or white responses. Concepts are not easily adapted to programmed instruction due to the amount of presentation material necessary and lack of facilitation usually needed by BD students to acquire and integrate concept-laden material. Reading and mathematics are the most commonly available commercially produced programmed instruction materials. The Sullivan Reading and Sullivan Math programs are two examples. There are materials available in all academic areas, including careers. Tutorial computer-assisted instruction programs often are high tech programmed instruction.

Before purchasing programmed instruction materials the BD teacher should examine the sequence of skills, the size of the steps in each presentation-practice session, self-checking and feedback capabilities, enabling skills necessary and similarity of content with that required by the curriculum.

Programmed instruction can be a useful tool in the BD classroom. It should be noted that it cannot be used effectively as the sole method of instruction for skills. Quality acquisition, retention and integration of skills require the facilitation of the teacher, distributive practice, concept development and generalization of learning to related skills and areas.

Computer-Assisted Instruction (CAI)

The introduction of the word "computer" into any conversation generally results in one of two reactions: horror and disclaiming, or delight. Most schools have computers available to teachers—the extent of use depends on which of the above two reactions is prevalent.

Computer-assisted instruction (CAI) has been found to be an effective strategy when used appropriately. Lieber and Semmel (1985), in a meta-analysis of studies examining the use of CAI with handicapped and non-handicapped learners, concluded that CAI is valuable as a supplement to instruction but is not an adequate replacement for teacher-directed instruction. Walker (1983) suggests that microcomputers enhance instruction due to factors such as increased active learning, varied sensory and conceptual modes usage, less mental drudgery, and more independent and individually tailored learning opportunities. Computers have infinite patience. There is little ego involvement or insult when a student is corrected by a computer; the computer is non-threating and non-judgmental. These are attributes that are valuable when working with behavioral disordered students in academic instruction.

CAI is not a "plug them into the computer and watch them learn" strategy, however. Use of CAI must be based on the purpose of instruction. If the software being used does not match the purpose of instruction, then the student will not learn what has been intended. Just as teachers use differing methods for introduction, practice, and application of skills, CAI methods must be equally differentiated. There are three basic purposes of CAI to be utilized in instruction: tutorial, drill and practice, and simulation.

Tutorial Programs

The purpose of tutorial programs is to teach new material. The key to tutorials is the frequency of student response required in relationship to the amount of information shown to the student. The more actively involved the learner in responding to information being taught, the more successful he/she will be in acquiring the skill. Additionally, with student responses, the computer can give feedback and adjust the information to the student's rate of learning. If a tutorial program is to be used for initial instruction of a skill, there are several facts to be considered. First, is the content of the program the content that the student should be learning? The title of the program does not always reflect the content accurately. Second, is the opportunity for student interaction frequent and relevant to the information to be acquired. This means examining each program to see if a student response is required after each presentation screen and that the response is directly related to the information to be acquired. Third, is feedback appropriate in terms of its timing following a response? Is the positive reinforcement for correct responses more positive than the reinforcement given for incorrect responses? Is there a student record system built into the program that will permit easy access by the teacher to monitor student progress? Lastly, can the student actually use the program fairly independently in order to acquire new information? If the use of the program is confusing or requires that a number of fairly uncommon enabling skills be mastered in order to use it, that particular tutorial may be more bother than help.

Drill and Practice Programs

Quality teaching requires that opportunity be provided for drill and practice on information already acquired. Drill and practice permit the learner to develop skills to an automatic level. Thus, increased speed and accuracy of responding are the two main goals of drill and practice. Using the computer for drill and practice is attractive for a number of reasons. It is novel so will be more motivating to students. Feedback is immediate and ideally allows for a self-correcting procedure. Student record systems built into the program free the teacher from grading stacks of practice sheets and provide ready analysis of progress over time. We cannot assume, however, that all drill and practice programs are similar in format and presentation. Thus each program must be examined for its match to the purpose we want it to serve.

Drill and practice programs should contain both a reinforcement element and a practice element. If reinforcement is more heavily weighted, accuracy will be impaired. Programs which are more practice

oriented may assume accuracy and have minimal feedback (Balajthy, 1984). Ideally, a program allows manipulation of these factors. Randomly generated problems in areas such as word recognition and math are desirable so that the program may be used many times by individual students. If problems are not randomly generated, students tend to learn a specific sequence of responses rather than learning to solve the problem independently and cognitively. Linear drill programs move the students' practice from least to most difficult. This type of program is most useful in drilling students on a series of skills rather than discrete skills.

A major consideration in drill and practice programs is the time permitted for student response. Since one purpose of such programs is to increase speed of response to an automatic level, the format of presentation-response-feedback is crucial. Programs are either self-paced (press a key after the response is given) or timed (the program determined how long a student will have to respond). Since we want to accommodate the students' learning rates, flexibility is needed in the timing aspect of programs. Some programs provide a means to select the speed of presentation, which permits a gradual decrease in the time allowed for response. Too little time for response will frustrate the student; too much time will be boring. Self-paced programs are adequate for beginning drill whereas flexible timed presentations will fine-tune skills to automaticity.

There are also feedback considerations to be examined in drill programs. Hofmeister and Thorkildsen (1984) reported that the timing, the type of combination of feedback with student response, and the general type of feedback in programs had differing effects on student skill acquisition. With regard to timing of feedback, delayed feedback resulted in greater retention of material after 24 hours than did instant feedback. Learning was found to be more rapidly acquired and more resistant to extinction when feedback followed only incorrect responses rather than only correct responses. Verbal feedback (the teacher or machine saying or printing "right" or "wrong") and symbolic feedback (flashing lights, tones, animations) produced more rapid acquisition of material than tangible feedback (tokens, candy, money). These findings must be considered in evaluating a program in light of the importance of feedback with BD students.

Game-like drills are becoming more common. They are more highly motivating to learners than a presentation-response type drill. Because they are more motivating, students are more willing to use them and thus spend more time actively engaged in drill and practice. Caution is advised, however, that the motivating and attractive game-like drill program actually covers the material to be practiced, and that graphics and game details do not obscure the accuracy and time factors to be enhanced.

Balajthy (1984) lists nine characteristics of a good drill program:

1. instructional value,
2. built in computer management system,
3. immediate feedback,
4. self-paced,
5. varying levels of difficulty,
6. provision for moving up and down in difficulty,
7. repetition of incorrectly completed patterns,
8. interesting game-like activity, and
9. interesting-arousing graphics.

Simulation Programs

The third type of CAI is the simulation program. Simulation programs are "imitations of processes" (Vargas, 1986). They present situations in which students must apply skills and knowledges to make decisions similar to an actual situation. The computer gives feedback as to the results and consequences of the student's decisions. The simulation program requires more student guidance by the teacher to learn to use the program as well as requiring more student enabling skills, critical thinking, and decision-making abilities. The major considerations in using a simulation program are the purpose the program serves within the curriculum, student enabling skills and the actual learning potentially gained from using the program. Many simulations are not close enough to real-life situations and have limited logical consequences. The less the simulation represents a true situation, the more likely students will simply learn the vagaries of the game rather than application of targeted knowledges and skills (Vargas, 1986). Simulation programs may provide a motivating tool for the practice and application of study skills such as map reading, note taking and organizational skills. To be effectively used within the BD classroom, simulation programs should include supplementary materials such as a student manual, teacher guide, handouts and worksheets (Blanchard & Mason, 1985).

Programs with Instructional Utility

Tutorials, drill and practice and simulations are types of computer-assisted instruction—they teach content. There are other types of computer programs which have instructional utility in the BD classroom although they are not considered computer-assisted instruction.

Word processing programs have been found to be a useful expressive tool for students. Word processing can be successfully used by students in any area in which a written final product is desired. This can be motivating to students in that errors will disappear forever in the editing process. Students with a writing block may be more successful using the word processor than being faced with pencil and paper written assignments. Blanchard and Mason (1985) suggest additional activities such as a classroom newspaper, rearranging sentences to create proper sequence, rearranging lines for outlining, completion of cloze passages, checking spelling from examples, and sentence completion. Word processing does have value in the instructional program when used as a tool for student generation of written products.

Interactive video computer systems are a type of tutorial CAI which uses the computer to generate questions requiring student response and a video cassette player to present information. The student views the presentation material from the tape on the monitor or television screen and is then asked to respond to questions over the material viewed. If there is an incorrect response, the presentation of material is reviewed. The advantages of this high tech system are the combination of video and audio information presentation and the active involvement of the learner in responding to topical information. The Career and Social Skills Training (CAST) program designed for behavioral disordered secondary age students uses this type of system to introduce career and vocational information. The use of the system and accompanying direct instruction materials in social skills provides an in-classroom approach to the integration of social skills instruction and career awareness. This is one example of how CAI can be blended with direct instruction and technology to provide an excellent teaching resource.

There are many utility programs designed for use by educators. The provide the teacher with a means of generating instructional materials more efficiently. Word searches, crossword puzzles, worksheets, study guides, tests, drill programs, and map studies are but a few of the instructional tools that teachers can develop by using commercially available software. The teacher does not need to have high level programming skills. In selecting software for these purposes the teacher should examine the number and type of tools that the program will generate, the program's record management capabilities, if hard copy and/or screen generation are the products, and the enabling skills necessary for the teacher to use the program.

Selection of Software

Computers and computer-generated images, such as video games, are a part of students' lives. The majority of students are highly motivated to use the computer and will even see computer use as a reward. The question, therefore, is with what students will CAI be most effective?

Different CAI programs require different enabling skills. The learner must be able to manipulate the keyboard or peripheral and see the monitor. If a program requires reading presentation screens, the student must be able to comprehend the vocabulary used. Identifying the necessary enabling skills by becoming familiar with the program before it is used by students will allow the teacher to pre-teach the enabling skills. However, if it would require more time to teach the enabling skills prior to program usage than the instructional program warrants or if the enabling skills have little generalization value, the program probably doesn't meet the student's or teacher's instructional needs.

CAI is presented primarily in a visual mode. Tutorial programs which present information to be read are most effective with students who are strong visual learners. This is not to say that weak visual learners or weak readers are unable to benefit from CAI. Some programs have a low readability, self-paced screens and graphics which may provide supplemental information rather than being only motivational in nature. programs which require manipulation of the keys or peripherals (e.g., Joystick or mouse) with resultant changes on the screen's graphics display satisfy some needs of the kinesthetic learner. Caution is appropriate in attempting to match modality strength with CAI characteristics. Just because it makes a lot of noise doesn't mean that the auditory learner will use it more successfully than the visual learner. Due to the relative novelty of CAI, students may be unduly distracted by graphics, sounds, necessary manipulation and the amount of reading or they may increase their attending due to the same factors.

Since most programs are dependent on some form of student input, the student has control over the flow of instruction. The BD teacher must, therefore, determine if each student is prepared to handle the independence and instructional responsibility necessitated by CAI (Hofmeister & Thorkildsen, 1984).

To be a successful user or facilitator of student use of CAI, the teacher does not have to be a computer

expert. Programming has not been mentioned once during this discussion. As long as the teacher knows how to access the program and get out of the program, she can use it successfully. This is, of course, very simplified. The best preparation for use of CAI in the classroom is to take beginning courses offered by the school district, the area education agency, computer stores, or colleges offering courses designed for teachers. There is usually someone in every school building who would be more than happy to share his/her knowledge of computers with a novice. It takes the teacher's time to experiment with the computer and various programs, but once that time has been invested, the computer can be an invaluable resource.

Using a computer in the BD classroom requires a space that is secure for the computer, monitor, printer and any peripherals. It is also advisable to have a secure area in which to store software. When the computer is in use, it should be in an area that will be far enough away from other student activity to preclude distractions from the computer or the user being distracted by other classroom activities while permitting close monitoring by the teacher of the student using the computer. As students become more adept with the computer, they have a tendency to want to create their own software, sometimes at the risk of the classroom CAI software. Rules should be established with the class regarding use of the computer to avoid damage to the equipment and to create a sense of ownership and responsibility for the computer by the students.

Computer software exists for all content areas. The teacher must be able to evaluate the software on the basis of the utility of the program for the curriculum and student needs. CAI is best used to supplement direct instruction—it provides another means for providing information, drill and practice and application in content areas. The best way to judge the value of CAI for students is to observe students using it. This can be achieved without purchasing the program by borrowing it from the area education agency, local curriculum lab, or a department or school that has already purchased it. If it doesn't fit the needs of the students, the curriculum or the classroom, don't buy it.

Peer Tutoring and Cooperative Learning

An increase in the amount of time in which students are engaged in academic tasks results in increased achievement (Rosenshine & Berliner, 1978). The range of students' achievement levels and behaviors, the number of areas taught , and the amount of paperwork involved in academic, behavior and regulation-related record keeping found in any BD classroom negatively impacts on the amount of time the BD teacher can directly engage students. Peer tutoring and cooperative learning are two strategies that can increase the amount of academic engaged time.

The primary academic purpose of each strategy is to increase engaged time, each using students as the basis for directing instruction. An additional benefit is the provision of instruction and opportunity to practice problem solving and social skills. Peer tutoring and cooperative learning differ in that peer tutoring uses a tutor to give information and conduct practice with the tutee while cooperative learning relies on group processes to engage group members and facilitate acquisition of skills.

Peer Tutoring

Peer tutoring has been found to be most effective in increasing achievement of students when tutoring programs are well structured, cognitively oriented, and of short duration (Cohen, Kulik, & Kulik, 1982). Benefits include increased engaged time, increased learning within a single session and better progression through sequences of skills (Jenkins & Jenkins, 1985).

Ehly (1984) clearly delineates the processes necessarily addressed in establishing an effective peer tutoring program in the regular classroom. These can be used as guidelines in developing a peer tutoring program for the BD classroom as well:

1. specify goals and objectives,
2. develop a strategy for the assessment of outcomes,
3. specify materials and procedures,
4. train tutors for their roles, and
5. monitor implementation.

Goals and objectives of the peer tutoring program should be clearly defined for the program itself (what will be accomplished by the tutoring program) and for individual tutoring sessions. With goals for the program, the teacher will be able to evaluate its effectiveness. Is it saving the teacher time? Are students achieving as desired? Highly structured and specified lesson objectives will give the tutor and tutee a concrete aim; they will know what to do.

Assessment of the program and student outcomes is necessary in order to make on-going modifications

of the program. Are the materials working? Are tutees achieving as expected? Are the pairings of tutors and tutees appropriate? On-going assessment will allow the teacher to make changes as soon as a difficulty appears.

Materials and procedures should be selected and developed in advance. This will give tutors the opportunity to become familiar with the materials they will be using. Behavioral procedures as well as instructional procedures must be shared with and learned by tutors and tutees prior to implementation of the program. They will need to know what is expected in terms of when sessions will take place, where materials are, what to do if there is a content-related question, what behavior is expected, what the consequences are for positive and negative behaviors, and what the rewards will be.

The selection and pairings of tutors and tutees are crucial. Tutors may be students from the BD classroom or volunteers. The entire BD class may be involved in both tutor and tutee roles depending on individual strengths and weaknesses. The tutors may be selected on the basis of their academic strengths, the rapport they have with specific students, and how well they can assume the responsibility of the tutor role. Being a tutor will give BD students the opportunity to experience a sense of success and improved self-esteem and to practice skills in an area of study. Tutees will benefit from the extra instruction, the opportunity to practice skills and from interaction with an appropriately paired tutor. Tutors and tutees should be matched on the basis of cognitive and affective strengths. Tutor training should include familiarization with the materials, the sequence of the skills to be taught, methods of correcting and praising tutees' responses, record keeping and behavioral procedures. The tutees should also be apprised of the rationale of the program, the skills they will be covering, and the academic and behavioral expectations of the program.

Monitoring the implementation of the program by the teacher will ensure that the goals and objectives of the program are being met and permit modification as needed. The BD teacher needs to observe sessions intermittently to ensure that the program and session guidelines are being followed. She needs to be available during sessions to answer questions and intervene when necessary. Each session's results should be reviewed by the teacher prior to the next session to make any changes that are necessary in the sequence of skills or difficulty of materials, administer rewards, and provide feedback to the tutor and tutee.

The BD classroom must be able to provide a somewhat private area for tutoring sessions, but still within sight and hearing of the teacher. Materials should be easily accessible. The arrangement and supervision of the tutoring program should strike a balance between independence of the pairs and active supervision by the teacher. Through this balance a feeling of high expectations and respect should develop and enhance the program.

Peer tutoring provides an opportunity for students to master material through increased time on extra instruction, practice, repetition or clarification of concepts (Jenkins & Jenkins, 1985). It can be useful in any content area providing appropriate tutors are available and the BD teacher is willing to spend the time preparing materials for specific instruction during the tutoring sessions. Careful examination of the selection of students, pairing of students, training, scheduling, space for sessions, materials and monitoring will provide BD students with increased academic engaged time to master skills.

Cooperative Learning

Cooperative learning is the work of a group of students toward a cooperative goal structure. The majority of research in this area has examined the outcomes of cooperative learning with groups of handicapped and non-handicapped learners as a means of promoting positive relationships between these groups (Cosden, Pearl, & Bryan, 1985; Johnson & Johnson, 1984; Slavin, Madden, & Leavey, 1984). Cooperative learning can be used successfully in the BD classroom to provide additional academic engaged time and to facilitate the acquisition of group processes.

According to Johnson and Johnson (1986), there are four elements involved in successful function of the group: (a) positive interdependence of group members, goal, reward, resources, roles and task; (b) individual accountability; (c) use of collaborative skills such as leadership, decision making and conflict management; and (d) group processing. These skills are not in the repertoire of most BD students and thus must be pre-taught through direct instruction and practice in controlled situations. If students are trained in cooperative strategies, they will be more successful in acquiring information and carrying out the tasks of cooperative learning. Since cooperative learning is a method sometimes used in regular education classes, the development and controlled practice of these skills will permit reintegrated BD students to experience more success in the regular education environment.

Johnson and Johnson (1986) define five steps necessary for the implementation of a cooperative learning program.

1. The objectives for each lesson must be clearly specified. Both academic objectives and collaborative objectives must be delineated. The academic objective should be at an appropriate level for the students with equally appropriate instructional methods and materials. The collaborative objective should detail what interpersonal skills will be necessary during that particular lesson. At the onset of cooperative learning, emphasizing specific group and interpersonal skills for use during a lesson will permit the mastery of these skills before moving on to other group and interpersonal skills.

2. The teacher must make several decisions for the conduct of the groups. The size of the group should be determined and may range from two to six. The size of the group must take into consideration the time allotted, the materials available, and the group and interpersonal skills developed and mastered at that time. Groups should start out small and then may gradually increase in size as students master the processes. Students should be assigned to groups on the basis of individual student strengths and weaknesses in academic and relationship areas, knowing who will work well with whom is a key factor. The amount of time allotted for group work includes not only the length of each session, but also the duration of group assignments. The length of the session will depend on the interpersonal skills of the group and the academic objectives. The duration of group assignments can vary from an entire semester, one curriculum unit, or if attendance is sporadic, new groups may be formed each day. A third decision is the physical location of groups for sessions. Within the group, a circle arrangement will help to alleviate "head of the table" problems and will help students to maintain eye contact and be heard. Students should be close enough to share materials comfortably. Groups should be far enough apart to avoid distracting each other. The fourth consideration is planning to promote interdependence. The number and type of instructional materials should be such that students are forced to share in order to complete the session objectives. If everyone has their own set of materials, cooperation is less necessary. If each student has one part of the materials, they must work together in order to complete the task. The final decision is that of assigning roles to the students. Roles should be complementary and interconnected with no overlap in order to encourage cooperative interdependence while avoiding arguments as to who is responsible for what job. A summarizer restates conclusions or answers at the end of the session; a checker makes sure that all group members can explain group results; an accuracy coach corrects group members' mistakes in summarizing or explaining results; and an elaboration seeker asks group members to relate new learning to previous learnings. These roles may be expanded by the teacher if a particular session requires additional responsibilities. Assigning roles will assist students in developing and mastering cooperative skills.

3. The cooperative goal structure and academic task must be clearly explained. This includes defining the academic task as understandable objectives and explaining how the students' work will be evaluated. In addition to the academic task structure and evaluation, the behavioral processes must be explained to students with clearly defined expectations and evaluation criteria. Positive interdependence in terms of the group goal and process should be stressed. This may be achieved by requiring the completion of a single task or product, providing bonus points or group rewards, warning students that any one of the groups' members may be selected to present group findings to the class. These methods ensure that the group will work cooperatively with all members sharing in responsibility for the acquisition of objectives and in the consequences for positive or negative results. Individual accountability can be structured through the lessons by monitoring individual student gains through individual assessment over material with group recognition for individual gains.

4. The teacher must monitor groups and know when intervention will be productive. Behaviors, collaborative and cooperative processes and academic task must be monitored in order for the teacher to make on-going assessment decisions regarding each of these factors. When it is apparent that skills are not being used or are being used inappropriately, the BD teacher should intervene to refocus the group, remind students of steps in academic or collaborative skills, and assist in the task by answering or asking questions or teaching task skills. The teacher may want to provide closure at the end of each session after student reporting. She may summarize main points, ask questions for more information, relate new learning to past or future learning, or answer questions.

5. The final strategy used in implementing cooperative learning is evaluation and processing by the teacher of student learning and group function. This aids the teacher in determining what academic and collaborative skills should be addressed next, which groups may need to be redefined, which groups may need to have more or less teacher intervention, and what content or skill areas are best addressed by cooperative learning. Students should be given feedback on the factors considered by the teacher

and be asked for their own evaluation of sessions. Providing an opportunity for student input and processing will give the teacher additional information and will encourage student ownership of cooperative learning methods.

Cooperative learning, like peer tutoring, provides increased academic engaged time for students. Once planned and implemented, both should be an efficient time-management tool for BD teachers. They should not increase the time burden of teachers, but should be an aid in managing classroom instruction effectively. Cooperative learning has an advantage over peer tutoring in that it has components intended to impact on behavioral and social skills. Peer tutoring is used primarily in the practice and clarification of concrete tasks while cooperative learning can be used effectively for application tasks in academic content areas. The BD teacher must examine student needs, classroom and school resources, and curricular demands to determine when the use of each of these methods is most appropriate.

Precision Teaching

An instructional strategy that has been effective in diverse settings and with diverse student populations is Precision Teaching. This procedure is not a method of delivering instruction nor is it content or grade level specific. It is a method of measuring behavior change. Precision Teaching allows the teacher to efficiently gather and analyze student data as means of monitoring student learning. Lindsley (1971), the originator of Precision Teaching, did not intend for it to be linked to a teaching style, methodology, disability group, or subject. It is a means of collecting information to increase student learning.

As Kunzelman, Cohen, Hulten, Martin, and Mingo (1970) state:

> Teachers must be interested in the function of their efforts. They should be interested in what the student has learned as well as how much the student has learned. The teacher should be interested in exactly what conditions produced the learning, so that if they were effective those conditions can be used or improved if found to be of little value. (p. 20)

Starlin (1982) reported that a student's academic proficiency is a critical element in the teacher decision making process. The two elements of proficiency are accuracy and fluency. Fluency is the number of total responses made in a standard time period. Fluency is a key component of Precision Teaching. It is also key to learning since it affects the student's ability to generalize skills. If a student is very accurate, e.g., completes 20 multiplication problems with no errors, but needs two hours in which to complete the task, no one would consider the materials mastered. The more fluent a student is while maintaining accuracy, the greater the likelihood that the skill will be maintained over time.

Precision Teaching is a method that incorporates both accuracy and fluency thus examining the total proficiency of a student. It provides the teacher and student with information to judge if learning is taking place and if the learning rate is acceptable. What follows is a brief overview of the component parts of Precision Teaching. For more detailed information, the reader is directed to Kunzelmann et al. (1970) and Starlin (1982).

The first step is to determine the behavior the teacher wishes the student to perform. The behavior must be observable, repeatable, countable, and contain movement. An example of a behavior that does not meet the criteria is listening. This does not contain movement nor is it accurately observable. Writing key words from a lecture is observable, countable, repeatable, and contains movement; therefore, it could be used as an indicator of the student's listening skill.

Through assessment the teacher determines if the student possesses the necessary tool or enabling skills to perform the behavior. For example, the teacher may pinpoint knowing the multiplication facts 0 through 9 as the behavior. Assessment yields the information that the student can write all numbers from 0 through 9 and can accurately multiply by 0s and 1s. Thus the tool skills of being able to write numbers and understanding the "x" sign are intact.

Next the instructor decides where to begin instruction. Should the student practice all unknown facts or a smaller slice of the unknown facts? Additionally the teacher needs to set an appropriate aim or goal for the student. The teacher may use suggested performance standards from published materials or set individual aims for students by assessing a related tool or enabling skill. For example, a tool skill for writing the answers to multiplication facts was being able to write numbers. The teacher would have the student write the numbers from 0 through 9 for one minute for approximately three to five days and average the results. A reasonable aim to set for the writing of multiplication facts would be one-half to two-thirds of the tool skill frequency. Tool skills always have a higher frequency since they must be at the automatic level so as not to interfere with learning the new skill. If needed, the aim can be adjusted periodically.

Once the pinpoint has been determined, the aim set, and the curricular starting point decided, then the teacher selects the appropriate practice format for the skill. Student progress is monitored by counting the number of times a movement cycle occurs within a specific period of time. A movement cycle is the beginning and ending of the behavior. For classroom purposes one, two, or five minute timings are usually adequate. This time frame is manageable within the classroom and even the most distractible student can usually focus on a task that lasts only one minute.

In our example, the student would be given a sheet of multiplication problems for 0s through 9s. The student would be allowed one minute to answer as many problems as possible. The number of correct and incorrect responses are tallied. These data are entered on a standard behavior chart or one minute graph such as the one used in the Computational Arithmetic Program by Smith and Lovitt (1982). Charts allow the comparison of the number of movement cycles successfully completed within a specified time, thus yielding movements per minute.

The evaluation of student progress is the next step. Evaluation does not occur until there are at least four or five days of data available. As a general rule the learning line (correct responses) should accelerate (/) while the errors decelerate ( ). Kunzelmann et al. (1970) use 1.25 as the minimum acceptable acceleration. Thus, if a student has a median of ten multiplication facts correct in one minute the first week, the teacher would multiply ten by 1.25 to project where the learning line should be the following week. By repeating this process and comparing the student's actual learning line with the projected line, the teacher has a means of determining if learning is progressing at an acceptable rate. Other indicators that learning is not progressing at an appropriate pace are three days of flat data, errors increasing, or correct responses decreasing.

The fact that learning is not occurring as expected is a signal to the teacher and student that changes must be made. The change can be in the type or amount of instruction or practice, the addition of a reward to increase student motivation, or a change in the method of input or output (channel). For example, the student might move from a see-write method to a see-say method.

Another change can be to slice back the curriculum being instructed, practiced, and measured. For the multiplication facts an appropriate slice would be to measure only proficiency on the 0s, 1s, and 2s instead of all the facts. Once the aim or goal was reached on those, another fact family would be added. As a general role, the teacher always wants the student practicing on the largest slice possible while maintaining proficiency. If curriculum is sliced back, it must be gradually reintegrated so that eventually the student will be held accountable for the behavior included in the pinpoint.

Any change made is noted on the chart. This phase change is indicated by a vertical line with a brief notation explaining the change. In this way, the teacher has a record of when and what types of change were initiated. This gives an accurate record of what produces acceptable learning rates for that student.

BD students who are fearful of the timing aspect may need to be desensitized to this factor. Since the timing sessions are short with immediate feedback, Precision Teaching is appropriate for most students. In addition, students can be trained to do their own graphing and interpretation of data allowing them more involvement and ownership of their learning.

A BD teacher wishing to implement Precision Teaching needs to have or develop multiple one minute timing sheets. This task is not insurmountable since most curricular areas from readiness to secondary level skills have had timing materials developed by the Great Falls Precision Teaching Project (undated).

Precision Teaching is not an instructional method. It gives the BD teacher and student accurate feedback on student learning and a data base from which to make instructional decisions. It is appropriate for a wide range of areas from oral reading, letter writing, spelling, and color recognition to reading comprehension and math computation. In addition, it can be implemented without excessive start-up costs and can be managed by aides, trained volunteers, or peer tutors. These factors make Precision Teaching an appropriate tool for use within the BD classroom.

Learning Strategies

Numerous research studies have shown that many low-achieving learners do not possess the necessary internal thought processes to be efficient, independent learners (Hall, 1980). Even though much of the data have been collected on the learning disabled population, the findings have relevance for the behavioral disordered population and the BD teacher. Has the student withdrawn from learning or developed inappropriate school behaviors because of academic failure or has the behavior created the academic deficits? Whichever is the case, many BD students have academic deficits. By utilizing the findings on the LD population who by definition have academic deficits, the BD teacher can increase BD students'

ability to learn. The goal of training students to use strategies to become independent learners is not in conflict with the goals of BD programming. Strategies acquired to facilitate learning can also be applied to problem solving situations. Strategy training can have behavioral as well as academic pay-offs.

A large amount of research with exceptional learners has been in the area of metacognition. Metacognition refers to "executive strategies" of learners. These students' executive strategies include planning prior to learning, monitoring progress as learning is occurring, and checking to determine if learning has occurred (Brown & Palincsar, 1982). Students could display these strategies through self-questioning while reading, recognizing structures in reading, adjusting reading rate, setting a study schedule, taking notes, establishing review periods, utilizing methods to improve memory, and organizing information to aid in retrieval (Baker, 1982).

Various strategy training methods have been used. Research indicates that effective training includes students being taught the significance of using the strategy, instruction on the use of the strategy, and instruction on how to monitor the learning while using the strategy (Brown & Palincsar, 1982). Other aspects of the techniques would include self-verbalization and instructional techniques to foster generalization and transfer.

There are numerous forms of strategies (Torgesen, 1982). One type involves strategies that are very task specific and thus not easily generalized (e.g., sequential sound building, regrouping rules for division). Another type is less task specific but academically related. These strategies might focus on memory techniques, note-taking or test-taking skills. A third type of strategy training concentrates on the broad process of problem solving. This type of strategy, because it is fairly general in nature, can be transferred to multiple settings. BD teachers are probably most familiar with this type of strategy training. The same steps incorporated into teaching BD students how to solve social and behavior problems can be utilized to assist the BD students in learning how to learn.

The goal of such instruction, according to Alley and Deshler (1979), is to teach students strategies " . . . that will facilitate [students'] acquisition, organization, storage, and retrieval of information, thus allowing them to cope with the demands of the secondary curriculum and the demands of social interaction" (p. 8). Deshler and Schumaker (1986) report that a specific structured methodology needs to be employed to achieve this goal.

As with other academic programming, the first step is assessment. Assessment gives the teacher and student information on strengths and weaknesses concerning the tasks to be taught. It is recommended that the student commit to learning the strategy at this point to increase student motivation and ownership (Hagen, Barclay, & Newman, 1982; Loper, 1982). The next step is to explain the parts of the strategy including how and where the student can use it. At this stage the situations where the student could use the strategy in settings other than school are discussed. This is an initial step toward transfer to multiple settings.

Next the instructor models the use of the strategy and involves the student in a structured demonstration of the strategy. The student then uses verbal rehearsal techniques to memorize the steps of the specific strategy. The students are directly taught the skills needed to successfully complete each step to mastery. First, guided and then independent practice is conducted on materials selected by the teacher. These materials are selected to control vocabulary, length, and difficulty.

The next step involves student practice on materials as similar as possible to those used in the regular education classroom. Accuracy and speed are both components of the mastery criterion. The aim is to have the students become proficient enough on the strategy steps to make them more easily generalized to other settings. A post-test is conducted to ensure that the students have achieved a sufficiently high mastery level to allow them to successfully meet the requirements of the regular education curriculum.

The final step is to increase generalization. Periodic checks are conducted to determine if the students are maintaining proficiency levels. Additionally, the teacher stays in contact with regular education personnel to help them reinforce strategy use by students.

The learning strategies developed at the University of Kansas Institute for Research in Learning Disabilities, primarily by Alley, Deshler and Schumaker, were intended for secondary learning disabled students. However, BD students, having many of the same cognitive and self-concept deficits as learning disabled students, may also benefit. Use of the strategies by BD students has proven successful. In addition, although the University of Kansas strategies were developed by secondary-age students, similar strategies have been used successfully with children as young as six years of age (Baker, 1982).

If the BD teacher wishes to incorporate strategy training, a few elements seem to be key. Modeling by the instructor and a continuum of overt to covert rehearsals facilitate the child's gradual internalization

of the executive and monitoring skills. Additionally, the sequence must be well planned with provision for multiple student practices. These practices should gradually move from teacher directed to independent practices.

It should also be remembered that strategies cannot be implemented unless students possess necessary prerequisite skills. Strategies do not replace direct instruction on skills (Loper, 1982). The University of Kansas strategies, such as sentence writing, teach the content skills needed. However, the student must be able to write. For the DISSECT strategy, which provides students with seven steps for deciphering unknown words in context, at least a third grade reading level is assumed.

The BD students who have difficulty with planning, monitoring progress, and evaluating progress would benefit from strategy training. The BD teacher will need to have a well planned sequence and develop lessons that include modeling, verbal rehearsal, guided practice and independent practice. To foster transfer and generalization, the BD teacher will also need to provide students with opportunities to use the strategies in multiple settings.

Sources of information concerning instruction in learning strategies are the University of Kansas Institute for Research in Learning Disabilities and the DLM Learning How to Learn materials.

TRANSITION PROGRAMMING

Throughout this chapter various references have been made to methods promoting transfer and generalization of skills to other content areas and settings. This section will briefly review previous suggestions and provide a structure for the transition of BD students to regular education settings as well as career and vocational areas.

Transition to Regular Education

Since one goal of behavioral disorders programming is the reintegration of the BD student into the mainstream of regular education, the BD teacher must plan for this occurrence. Just as a unit is planned, so must this transition be planned. It does not occur automatically. By manipulating various aspects of the instructional setting, the BD teacher is more likely to foster the transfer of skills to settings other than the BD classroom.

Anderson-Inman (1986) delineates four areas to be addressed in trans-environmental programming: (a) environmental assessment, (b) intervention and preparation, (c) promotion of transfer across settings, and (d) evaluation in the target environment. Thorough examination of these areas by the BD teacher will aid in successful reintegration.

An environment assessment is best conducted through the use of a survey or structured checklist noting key regular education classroom requirements. A compilation of teacher-by-teacher or class-by-class information will provide the BD teacher with an integration guidebook which will structure reintegration decisions. Matching BD student skills with those required in a specific class will give the BD teacher solid data on which to base decisions regarding skills to be taught in the BD classroom to prepare the student for reintegration, whether a particular student is ready for reintegration, and what BD classroom support may be necessary once the student is reintegrated. For example, survey information can quickly apprise the BD teacher of the study skills required in other academic settings. It can be employed when deciding which study skills to teach in the BD classroom. By keeping a record of the study skills, methods and materials for each department, regular education teacher or class, the BD teacher has a ready reference guide for reintegration decisions. Additional information to be kept in the integration guidebook are teaching style, teacher behavioral expectations and major projects for individual courses or classes.

Intervention in preparing BD students for reintegration is ongoing. Preparation of the student leads directly and gradually into transfer across settings. For any behavior to be easily transferred to multiple settings, it must be at or approaching the automatic level, meaning that the student can easily use the behavior without investing large amounts of energy in recalling what the behavior is and how it is produced. The necessity for automatic retrieval and use of behaviors requires sufficient practice by the student over time. For example, if note taking is an academic behavior the BD student must have in his/her repertoire to be successful in the regular classroom setting, then the BD teacher must directly teach that skill and provide feedback, prompts, and practice until the student independently and spontaneously uses the skill. If a student consistently needs teacher reminders to take notes in the BD classroom, then the likelihood of the student displaying independent note taking behavior outside of the BD setting is minimal.

Often BD students will not only need to be taught the academic skill but will also need practice in recognizing appropriate situations for skill usage (Ellis, 1986). This can be accomplished through discussion

and by teaching clue words or behaviors that usually are antecedents to the behavior. As an example, students may need to be taught that whenever the teacher writes something on the chalkboard, that behavior should trigger student note taking.

Student proficiency in a behavior is often not sufficient to guarantee student independent usage. The student must begin to assume ownership of his/her learning (Ellis, Lenz, & Sabornie, 1987; Schumaker et al., 1983). Instructing students in graphing their own data, using self-monitoring checklists, and setting learning goals are three means of facilitating this process.

Transfer of skills to other settings will be facilitated if the teaching methods used by the BD teacher approximate those used in regular education settings (Anderson-Inman, 1986). If individualized instruction is replaced with group instruction and textbooks similar to regular education textbooks are used in the controlled BD setting, the BD student will be more comfortable in the regular education classroom. By knowing the preferred methods of presentation of regular education teachers and utilizing those methods the BD teacher will assist the BD student in identifying trigger mechanisms and practicing the behaviors triggered in the BD classroom before applying skills in the reintegrated setting.

The BD teacher can never assume a specific behavior or skill is in the student's repertoire until it has been observed in a setting as similar to the planned integrated setting as possible. Visiting classrooms or actually conducting BD class instruction in regular education classrooms prior to student reintegration can make students more familiar with the environment, thus fostering behavior and skills transfer.

Once the student is reintegrated, the BD teacher must monitor the student in the regular education setting. Frequent contact with the regular education teacher will facilitate any pre-teaching of vocabulary or concepts, preparation for tests, or assistance with class projects that may be needed for student success. Contact with the regular class teacher will also provide supplemental information for the integration guidebook. The student should be supported in the use of self-monitoring and reinforcement methods which have been successful in internalizing student control and assumption of responsibility for learning. Monitoring must be on-going, but will decrease in intensity as the BD student successfully transfers skills to the regular education setting.

In summary, transition to the regular education setting requires planning by the BD teacher for the inclusion of content, materials, methods and environment as similar as possible to that of regular education classroom instruction. Students who have learned skills to an automatic level will be more likely to be able to transfer those skills across settings. By providing students with the academic and behavioral skills needed, the BD teacher can closely match the requirements of regular education instruction with student skill and thus facilitate successful reintegration.

Transition to Career and Vocational Settings

Since one goal of behavior disorders programming is the return of the BD student not only to the mainstream of school but also to the community, the BD teacher must select instructional and behavioral goals that enhance the likelihood of this goal being accomplished. Gains made in one setting or area can positively affect others. The set of skills required of the student to demonstrate teacher-pleasing behaviors (e.g., on-time, assignment completion, accepting negative feedback) are also needed for successful employment.

When considering reintegration into the regular classroom, the BD teacher examines the learner characteristics, the course and content demands, the environmental characteristics and the teacher expectations and instructional style. When designing a program to facilitate student movement from the school setting to the work setting many of the same considerations are needed.

The learner will need demonstration, simulations and guided practice to translate school skills to employment skills. This transfer can be facilitated by the usage of a comprehensive career curriculum. The curriculum will need to be designed to incorporate multiple strands that impact on employability.

The program must meet the needs of students who have probably never been exposed to direct instruction of career skills. A career exploration strand needs to encompass not only student exposure to multiple career choices and the requirements for each, but must also contain instruction on some basic academic skills needed for career choices. These would include listening, reading, speaking, and writing as they are used on the job. Hands-on practices with phone messages, memos, service orders, retail sales forms, machine operating instructions, and employment forms would be required.

In addition to the classroom component it is highly beneficial to incorporate a complementary job-site exploration component. In some cases, the district may have personnel who already fulfill the roles required of this component. In order cases, the area education agency may provide a work experience

coordinator. If neither option exists, the BD teacher will need to examine time commitments in the classroom. It may be feasible to structure the day in such a way that release time is made available for the teacher to supervise exploratory work-site students. This option is the least preferable since the finite time for quality instruction may prohibit quality job site supervision.

A second strand in the career curriculum should include further job site placement but for longer periods of time than offered by the exploratory. It is essential that each job site be selected with student characteristics in mind as well as the job environment, and task requirements. Instructionally, this strand should encompass the range of skills needed by the student to successfully seek employment independently. Various classroom activities can include video-taping mock interviews, writing letters of application, developing data sheets and resumes, and independent completion of job applications.

The final strand should emphasize integration of skills previously taught as well as introducing and practicing job-seeking skills. Verbal communication skills need to be given priority. The job-keeping skills will directly relate to problem solving, social, behavioral, and affective skills that are an integral part of the BD program. By utilizing realistic practice and role-playing opportunities within the school setting and by gradually providing opportunities within the community with decreasing levels of support, the transfer of skills needed for employment is enhanced. Additionally, by beginning job-site placement while the student is in school provides an excellent vehicle for corrective feedback and practice prior to the student's independent entry into the job market.

SUMMARY

The area of structured academic instruction is a complex one. The BD teacher has the dual responsibility of modifying student behavior and delivering academic content. However, the classroom and the instructional activities that take place there are an integral part of the therapeutic environment. For successful reintegration the students must display a set of appropriate behaviors, but they must also have mastered the required academic content and skills. Without the academic component the BD student enters the regular setting as a remedial learner. Positive behavioral gains can deteriorate if the BD student becomes frustrated with the academic demands of the regular classroom setting. Positive self-concept carefully fostered in the BD setting can be damaged if the BD student perceives him/herself as a non-learner.

Only by carefully planning instructional content, methods, and materials and by staging the environment to approximate that of regular education will the BD teacher be able to equip students with the full range of needed behavioral and academic skills required for successful reintegration into regular education and society.

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Chapter 10

A FUNCTIONAL CURRICULUM MODEL FOR SEVERELY DISORDERED STUDENTS

Gary Sasso, Ph.D.
Assistant Professor
College of Education
University of Iowa
Iowa City, Iowa

Deb Scott-Miller
Education Consultant
Child Psychiatry Services
University of Iowa
Iowa City, Iowa

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Chapter 10

A FUNCTIONAL CURRICULUM MODEL FOR SEVERELY DISORDERED STUDENTS

Gary Sasso, Ph.D.
Deb Scott-Miller

INTRODUCTION

In the past 10 years, there has been a shift in orientation toward the education of children and youth with severe disorders. Historically, these individuals were not considered to be the concern of public education. The major issue centered around the notion that it was possible to create an educational environment suitable to the needs of children and adolescents with severe disorders (Burton & Hirshoren, 1979). A related argument was that these students would be ridiculed and rejected by their nonhandicapped peers (Charles & Malian, 1980). However, most educators today agree that not only is it possible to develop appropriate programs in the public schools for these students, but that programs in public schools for these students, but that programs in public schools are far more effective and efficient than segregated schools or residential placements. The rationale for integrated school programs for children and youth with severe disorders includes several related factors (Simpson & Sasso, 1985).

1. Skill development occurs best in integrated settings: One of the primary goals for severely disordered students is the development of social skills. These skills are most effectively learned through repeated trials. Therefore, the best place to practice new social skills is in the environment in which they will occur.
2. Integrated settings most effectively prepare severely disordered individuals to live independently in normalized environments: The criterion behavior for these students, for any student, is independent and effective life in the community. Therefore, it makes no sense to isolate them. There is, in fact, some truth in the old cliche that what life in institutions best prepares severely disordered individuals to do is live in an institution.
3. Integrated settings are congruent with legal and legislative mandates: They comply more fully to the "spirit" and intent of a least restrictive environment.
4. Integrated settings are fiscally prudent: It simply costs less to maintain one administrative and custodial staff. For example, the cost in Iowa of maintaining a severely disordered individual in a residential facility is currently $42,000 a year.
5. Integrated educational programs are beneficial for nonhandicapped persons: The increased emphasis placed on the education of students with severe disorders in the past 10 years has resulted in interventions which are very effective. Consequently, more and more severely disordered adolescents and adults are entering into gainful employment. An early school exposure allows nonhandicapped students opportunities to learn about the diversity of individuals with which they will have contact as adults. In addition, recent literature suggests that nonhandicapped students benefit from interactions with severely handicapped individuals, through social skills gains and even improved self-concept (Sasso & Rude, 1986a).

The children and adolescents that we will be discussing in this chapter differ in significant ways from other BD children and youth. It includes students with autism and to a lesser extent, those with various psychotic disorders. Although autism is no longer considered to be a behavioral disorder (DSM-III defines it as a developmental disability caused by a physical disorder of the brain), in many states a teaching certificate in behavioral disorders is required to teach in classrooms for autistic students. Autism differs from other forms of behavioral disorders in many important ways. However, the most salient distinction for the purpose of curriculum development is an often severely impaired cognitive functioning level. Work is currently under way to revise the definition of autism in the Diagnostic and Statistical Manual of Mental Disorders (1980). In all probability, the proposed definition will include the following components:

1. A quantitative impairment in reciprocal social interaction (two of the following):
    a. Marked lack of awareness of the existence or feelings of others.
    b. Absent or abnormal seeking of comfort at times of distress.
    c. Absent or impaired imitation.
    d. Absent or abnormal social play.

e. Impairment in the ability to make friends.

2. A quantitative impairment in communication (one of the following):
   a. No developmentally appropriate mode of communication.
   b. Absent or abnormal nonverbal communication.
   c. Abnormalities in the form of speech content.
   d. Impairment in the ability to initiate or sustain a conversation with others, despite adequate speech.
   e. Abnormalities in the production of speech.
3. A markedly restricted repertoire of activities, interests, and imaginative development (one of the following):
   a. Stereotyped body movements.
   b. Persistent preoccupation with parts of objects.
   c. Marked distress over changes made in trivial aspects of environments.
   d. Unreasonable insistence on following routines in precise detail.
   e. Absence of developmentally appropriate imaginative activity.
   f. Stereotyped and restricted patterns of interest.

Within any given population of autistic individuals, it is estimated that 40 percent will have IQs below 50. However, even the estimated 60 percent above a 50 IQ will be seriously impaired, particularly in the areas of communication and social interaction.

A Functional Rationale

When public school programs were initially developed and implemented for severely disordered students, the curriculum content generally reflected one of two approaches: developmental or remedial. The curriculum for severely disordered students was, then, simply an extension of current educational practice with mild and moderately disordered students.

The developmental approach to curriculum development was probably the most widespread. Within a developmental program, it is hypothesized that all individuals are subject to predictable learning sequences and rates (Piaget & Inhelder, 1969). That is, children must learn certain prerequisites before they will be "ready" to master the higher level skills and concepts that follow. For example, children learn to crawl before they walk, babble before talking, and manipulate objects prior to the ability to engage in abstract thought. However, attempts to explain development and plan programs for severely disordered children and adolescents around a model that stresses a fixed, innate developmental pattern have been less than satisfactory. There are many limitations inherent in this model when applied to handicapped students. First, it is still unclear whether certain developmental milestones are always reached in an invariable sequence. Antecedence does not imply causality. There are many documented instances of children who do not proceed according to a fixed sequence (Brown, Ranston, Hamre-Nietupski, Johnson, Wilcox, & Grunewald, 1979). Secondly, it is often difficult to determine whether certain earlier accomplishments are prerequisite behaviors or whether the sequences are merely coincidental. Finally, the notion that children normally acquire skills in a particular manner doesn't necessarily imply that this is the best way for all children.

The common assumption under this model is that children and youth with severe cognitive deficits progress through the same stages but at a later time. Unfortunately, a strict adherence to the successful completion of development milestones has at times resulted in 18- and 19-year old students being taught conservation of mass through such activities as choosing "bigger" and "smaller" objects. As a consequence of this misapplication, many of these students completed their school training with very few of the skills they needed to participate even modestly in community settings. The result was a 20-year-old functioning like a 4-year-old. Institutionalization was only postponed.

The other curriculum approach handed down from the successful programming efforts for students with mild and moderate handicaps was remedial in nature. Remedial programming is based on an excess-deficit model. That is, disordered students are compared to the school-related skill levels of typical children to determine inappropriate behaviors which occur at high levels (Excess Behaviors). Programs are then constructed which attempt to deal with these excesses and deficits and the handicapped child is brought "up to grade level." Deficits training combined with programs to eliminate inappropriate behaviors, often following an operant approach, has been quite successful for students with mild and moderate handicaps but less successful for students with severe disorders. In many curriculum areas, the remedial skills programs appropriate for typical and mildly disordered students are not relevant to the needs of students with severe disorders. For instance, continued phonics instruction with a 14-year-old autistic adolescent with

no reading skills is both a frustrating and useless exercise for the teacher and the student. Another issue which inhibits the effectiveness of the remedial approach with severely disordered students is a lack of generalization and maintenance of acquired skills (Sailor & Guess, 1983; Stokes & Baer, 1977). Although this is a problem common to all of special education, it is of particular concern in the education of autistic children and youth. One problem is stimulus overselectivity (Koegel, Egel, & Dunlap, 1980), a deficit found in a high percentage of autistic individuals. It refers to the autistic child's tendency to respond to an overly restricted portion of complex stimuli. For example, some autistic students may learn certain tasks only on the basis of incidental hand movements by the teacher or respond to a word based on a single letter (Rincover & Koegel, 1977). The result is a lack of generalization of skills across both environments and persons. There are several techniques which are used to overcome the effects of stimulus overselectivity. Perhaps the most effective approach involves teaching the skill in the environment that it normally occurs, thereby avoiding many of the problems associated with generalization and overselectivity.

In the past 10 years, educators have developed a number of techniques and curricular modifications to overcome the problems inherent in both developmental and remedial curricular approaches (Holvoet, Mulligan, Schussler, Lacey, & Guess, 1984). One of the most promising and prominent changes in curriculum planning to arise from these efforts have been programs designed to insure the functionality of the skills that are taught to severely disordered students (Brown, Branston-McClean, Baumgart, Vincent, Falvey, & Schroeder, 1979). The rationale behind this approach is that we, as teachers, should be involved in teaching skills, based on individual levels of functioning, that severely disordered students need to be successful in their lives. The term functional refers to skills which are likely to be required in the daily life of the severely disordered child or adolescent. Functional curricula may differ in minor respects, but there are factors which are common to this approach. They include:

1. The curriculum must include skills chosen on the basis of the chronological age of the student rather than mental age. For example, an 18-year-old severely disordered adolescent should be learning the skills necessary to be as independent as possible. Work skills, transportation-related skills, and dressing/grooming skills are examples of skills related to this age.
2. Skills are taught most effectively and efficiently in the environment in which they occur. As previously mentioned, programming for the generalization of acquired skills can be minimized by teaching in a natural environment. For example, teaching a student to ride a bus by providing simulated activities in the classroom is likely to be a long, arduous process requiring several generalization steps. Conversely, teaching this skill on the bus traveling routes the student is likely to take would require minimal transfer training.
3. Instructional materials should ,to the degree possible, consist of real-life objects. Again, transfer will be accomplished more effectively by removing opportunities for stimulus overselectivity.

Developing curricular plans that include functional components requires more than taking students into community settings for training. In some instances, this may not be feasible or even desirable. There are, for instance, many skills that the student can acquire more efficiently through the repeated trials (massed practice) available in a classroom setting. However, all training in the school can be arranged to maximize the potential for generalization. For example, instead of teaching an autistic child to sort different colored blocks, a more functional task would be to teach the student to sort socks as part of a dressing program. In addition, skills can be assessed to determine multiple usage. Teaching a student to grasp small objects between his thumb and forefinger would allow him to: 1) use a vending machine, 2) pull zippers up, and down, and 3) tie shoes.

There are several considerations in the development of a functional curriculum for severely disordered children and youth. First, these students prefer isolation. When presented with activity choices, they are most likely to select options which are isolative rather than interactive. This requires the development of programs which require cooperation and interaction with others. Second, many disordered students have severe communication deficits that require programs that don't rely heavily on verbal communication. These students also encounter difficulty in responding to novel stimuli presented in the auditory mode, which demands the use of experiential information and greater clarity in the use of prompts and cues. In addition, attending to events of moderate or low impact often poses difficulties which requires presentations of greater intensity. Finally, teachers often must highlight relationship information due to students' problems with sequence and cause/effect relationships (Donnellan & Kilman, 1986).

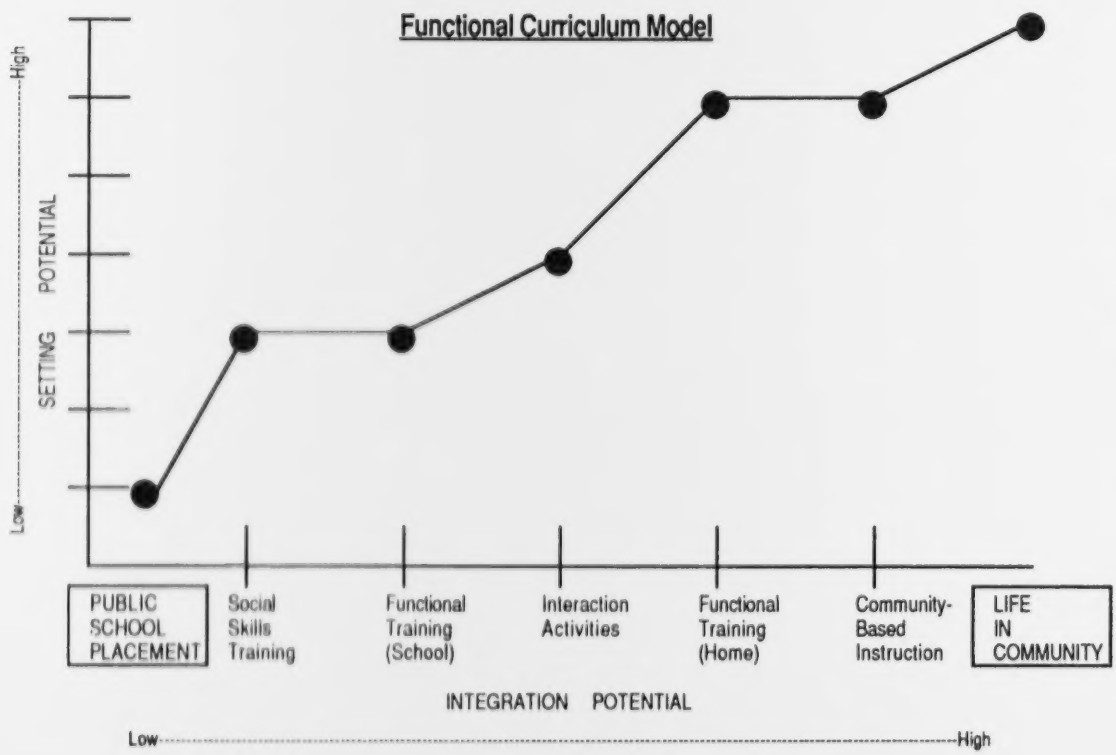
Because severely disordered individuals so often experience difficulty in identifying the relationship between an event and its consequences, the critical effect (i.e., outcome) of the activity or task must be identified (White, 1980). For example, for a hungry student, the critical effect is that he or she eat.

In developing the ability to communicate this need in a functional manner, it is important that the teacher institute a program that reliably produces the desired effect (i.e., eating) throughout the instruction. Neel, Billingsley, and Lambert (1983) suggest that in instruction based on the critical effect of the skill, teachers must focus on the function and form of the behaviors. Function refers to the identification of the student's level of functioning in current educational environments and focusing educational programs on increasing independent functioning in those environments. Form is the way a student accomplishes those behaviors. For example, communicating need (function) may be accomplished in any of a number of ways by the student (form). The student might point, reach, cry, or verbalize in an attempt to make his or her desires known (Donnellan & Neel, 1983). Therefore, the teachers must accurately assess the student's current environment and develop programs which train age-appropriate, functional skills.

Functional Curriculum Model

Recent research in the area of severe disorders suggests that programs which incorporate strategies to increase student interaction with nonhandicapped peers in public school and community environments and actively teach useful skills within those environments, are highly effective approaches for severely disordered individuals (Sasso, Simpson, & Novak, 1985; Voeltz, 1982). Setting an entry level of integrated public school placement and a criterion goal of independent life in the community, there are many techniques suggested by the literature that provide movement along a continuum from school placement to community functioning. As can be seen in Figure 1, this continuum identifies two factors as necessary for providing an adequate training program for severely disordered students. The first, INTEGRATION POTENTIAL, refers to the amount of contact between severely disordered students with nonhandicapped peers that the procedure or technique allows. The second, SETTING POTENTIAL, deals with the degree to which the procedure provides training and activities in increasingly less restrictive settings. Thus, within this model procedures can be assessed to determine the degree to which they provide increased interaction with peers and access to nonhandicapped environments. The curriculum components included in the continuum are those which have been documented as effective and developed for the purpose of movement toward the criterion of life in the community. The remainder of this chapter will be devoted to a description of these components and examples of their use with severely disordered students.

Figure 1



SOCIAL INTERACTION

A critical area for all children and youth with autism is the area of social development. For the past several years, the field has been preoccupied with a debate concerned with whether autism is primarily a cognitive or communicative disorder (Donnellan & Kilman, 1986). It is becoming increasingly clear, however, that social isolation is a central defining feature of the disorder (Gaylord-Ross, Haring, Breen, Pitts-Conway, 1984). In all, it is fair to conclude that peer social skills represents a legitimate instructional domain with significant developmental and social consequences for severely disordered students.

A major benefit of the placement of severely disordered students in proximity to nonhandicapped students is that it allows interactions between students. The effects of these interactions on the attitude and behavior of the nonhandicapped students should be of particular concern to special education teachers. As Bricker (1978) has noted:

> It seems agreed that peer interaction is both necessary for and has the potential of influencing a child's behavior and attitudes; however, peer interaction can have an influence only when children are given the opportunity to observe and have contact with one another. For normally developing children to gain knowledge about and tolerance for varying handicapping conditions, they probably need the chance for direct interaction (p. 6).

Social interaction with nonhandicapped peers is important to the development of students with severe disorders for many reasons. First, normalized social relationships form a major part of the criterion goal for disordered students. Daily contacts through work and living will require that both nonhandicapped and severely disordered students know how to interact effectively. Secondly, increased contact with nonhandicapped students provides increased opportunities for modeling of social behavior by the severely disordered individual. Although there is evidence that many severely disordered children and youth lack the prerequisite behaviors to benefit from modeling effects or vicarious reinforcement, there are many instances in which imitation of nonhandicapped students has resulted in higher levels of appropriate social responding (Kazdin, 1973). A final rationale for creating interaction opportunities is that they allow opportunities for nonhandicapped students to teach skills to severely disordered students and in turn learn about people with disabilities.

Several procedures have been developed and evaluated to provide positive interactions between severely disordered students and their nonhandicapped peers. These include "Special Friends" and peer initiation programs (Strain, Kerr, & Ragland, 1979; Voeltz, 1980), peer tutoring interventions (Kohl, Moses, & Strettnor-Eaton, 1983; Sasso, Mitchell & Struthers, 1986), structured interaction activities (Sasso et al., 1985; Simpson, 1980), and programs designed to provide training of nonhandicapped students by other nonhandicapped peers (Sasso, Hughes, & Swanson, 1986).

"Special Friends" and peer initiation techniques have been used extensively with severely handicapped students. These programs, which usually require a minimum of pretraining, can result in increased social initiations by both nonhandicapped and severely disordered students. Nonhandicapped students are paired with severely disordered children and instructed to interact socially. Therefore, this technique is most often used during recess or in other free-time situations. Nonhandicapped students generally receive initial training sessions prior to exposure to the disordered students. The training can be carried out in several ways, but most training packages to date have included the following components (Sasso et al., 1986):

1. Brief discussion of individual differences.
2. A description of the disordered students in the school, to include names, method of communication, their educational program, skill levels, and likes and dislikes.
3. A discussion of games and activities which nonhandicapped students prefer, followed by the generation of possible activities that would provide mutual enjoyment.
4. Training in alternative communication systems (i.e., manual sign and pictorial).

Following training, students are paired and instructed to engage in activities. Ideally, the result of the technique will be an increase in social initiations by both handicapped and nonhandicapped students, a positive shift in nonhandicapped attitudes, and the formation of friendship relationships. And, in many instances, these goals have been accomplished.

These gains have been enhanced by several recent variations within the programs. Once such modification has been the development of structured interaction activities (Clark et al., 1983b). Interaction activities are designed to provide essentially the same types of social contacts which are available in peer initiation programs with the addition of teacher supervision. The increased structure of the technique was added due to research which suggests the importance of initial contacts between nonhandicapped and severely

handicapped individuals. That is, when severely handicapped and nonhandicapped children are allowed to interact in a nonstructured environment, the result has been negative social interactions with a concurrent negative shift in nonhandicapped student attitudes (Donaldson, 1980). Interaction activities provide a format for mutually enjoyable activities which are directed by the teacher to ensure positive social contacts. The activities can be developed for one-to-one, small group, and large group situations. The determination for grouping should be made on the basis of severely disordered student prerequisite skill level. If the student possesses the skills and tolerance necessary for group interaction, it is advised that the small or large group format be employed due to the increased potential for social interaction afforded by these formats. Many of these activities can be developed by the teacher. In addition, there are manuals available which include descriptions of structured activities. An example of a structured interaction activity, taken from Clark et al. (1983b), can be seen in Figure 2.

Figure 2
Structured Interaction Activity

MATERIALS

Kraft paper (adequate amount to complete drawings of all group members)
Crayons, assorted colors
Scissors
Pencils

PREPARATION

Prepare room to allow adequate space for body drawings (students need space to recline on sheet of Kraft paper)
Gather all necessary materials
Arrange with principal for an area in the school halls where the finished products can be displayed

DESCRIPTION

Teacher explains activity as follows:

1. Teacher discusses the idea of doing a body drawing of each individual, and displaying the finished drawings as though they were all taking part in some activity (teacher may suggest that students plan a theme around a special event at school. For example, Open House, Football Game, Talent Show, etc.).
   a. Students work cooperatively to decide on a theme (i.e., playing on jungle gym, playing kickball, basketball, football).
   b. Students decide how to position each individual to depict them taking part in the activity.
2. Have the students draw around the bodies of each other.
3. Each student colors the drawing of his/her body as it is finished.
4. Then have the students cut out the drawings as the coloring is finished.
5. Students work cooperatively to arrange the drawings so as to depict the theme.

ADAPTATIONS

Not appropriate for severely handicapped students with extensive motor limitations.
Clark et al. (1983b)

Two other modifications can be made which enhance the effectiveness of peer initiation techniques. The first, although relatively simple in nature, can have a substantial effect on social interactions. This variation involves choosing nonhandicapped participants who hold high social status in the school and/or class. It has been shown that his modification to peer initiation interventions can increase the number of initiations by the high status participants (Nietupski, Stainback, Gleissner, Stainback, & Hamre-Nietupski, 1983) and positively effect the social interactions of other nonhandicapped students present in the environment (Sasso & Rude, 1987). High status designation can be determined either through the use of sociometric techniques or simply by asking regular education teachers to identify popular students in the classroom. The peer initiation program can then be implemented as previously described using high status nonhandicapped peers.

The second variation involves teaching nonhandicapped peer initiators the skills necessary to reinforce and solicit interactions with other nonhandicapped students. Again, although this training will require relatively little additional training time, the effects can be substantial (Sasso, Hughes, & Swanson, 1986).

Within this variation, the nonhandicapped peer initiators are instructed to praise other nonhandicapped students who approach the severely disordered students and initiate a social contact. Such reinforcement phrases as "He really enjoys it when you talk to him" or "He likes that game" can be readily taught to the students to be delivered contingently. In addition, the nonhandicapped initiators can be instructed to actively solicit other nonhandicapped students for games and activities.

Although peer initiation programs are straightforward in their implementation, there are several procedural considerations which increase the effectiveness of the technique. Some of these have already been mentioned, and they include:

1. After the intervention is under way, teachers should provide intermittent prompts to the nonhandicapped students to remain in contact and initiating with the severely disordered students.
2. A written list of games and activities provided to nonhandicapped students can assist them in their interactions.
3. Nonhandicapped peers should not be trained or expected to deal with any inappropriate behaviors of the severely disordered students. Instead, the teacher should provide the contingencies.
4. Nonhandicapped peers can be taught the skills necessary to communicate in the severely disordered student's preferred mode of communication (i.e., vocal, manual sign, pictorial).
5. When initiating these types of programs, the teacher should be aware of the powerful effects of modeling and imitation on the behavior of the nonhandicapped peers. That is, children who have had little prior contact with severely disordered students are very likely to model the interactions of the teacher, especially early in the program. Therefore, during initial peer exposures the teacher might interact with the severely disordered students in a social rather than instructional manner to allow the nonhandicapped participants an opportunity to model correct behavior.
6. It is recommended that the teachers adopt a demeanor that reflects a natural or normal attitude toward interactions between severely disordered and nonhandicapped students. In other words, nonhandicapped participants should be made to feel that it is perfectly natural to talk and play with disordered students. The alternative to this is to set the program up as an event which, although it may result in initial success, in the long term may reinforce the notion that severely disordered students are "Different."

Peer tutoring is another procedure which has been used in recent years to provide interactions between severely handicapped and nonhandicapped students (Almond, Rodgers, & Krug, 1979). Ample evidence exists that tutoring can be an effective method of instruction for students with severe disabilities (Donder & Nietupski, 1981; Kohl, Moses, & Strettner-Eaton, 1984; Lancioni, 1982). However, the evidence regarding the effects of tutoring on social interactions is less clear. Noll and Simpson (1986) found that a peer tutoring intervention had no significant effects on the attitudes of the nonhandicapped tutors. Similarly, Sasso et al. (1986) reported in a comparison of peer tutoring and interaction activities that tutoring did not automatically encourage further interactions and created an instructional rather than social atmosphere. Therefore, based on very limited research in the area, it would appear that peer tutoring may not be justifiable from an integration standpoint. However, the critical factor may be the structure built into the tutor training program. That is, in the above mentioned studies, nonhandicapped peers were taught to provide training in a very structured manner, utilizing prompt hierarchies and contingent reinforcement. It may be that tutoring conducted in play settings, using social rather than academic skills as the target behavior, may result in more cooperative, friendship interactions. At this time the most that can be said is that teachers should be cautious in their use of peer tutoring as a procedure to enhance integration.

In summary, there are many strategies available to enhance social relationships between severely disordered students and their nonhandicapped peers. These techniques are a fundamental and necessary part of any curriculum for students. However, these strategies should not be viewed in isolation. Instead, they must be ongoing and combined with other procedures for maximum effect. Social skill training for severely disordered students, discussed in the next section, can be used to enhance the effects of any social interaction intervention.

FUNCTIONAL SKILLS TRAINING

The responsibility for preparing severely disordered individuals for community functioning falls primarily on the educational system. Specifically, secondary programs are targeted to provide a curriculum framework to teach the functional roles that a special student must assume. Although functional programming is utilized throughout the educational system, success in this program becomes essential as students prepare to exit the school. Thus, two specific goals of secondary programs have been recognized:

1. To prepare the individuals for functioning in future work and living environments, and
2. To ensure an effective transition to these environments (Schopler & Mesibov, 1983).

In looking at work and living environments, educators must also examine the roles and/or responsibilities that these handicapped individuals must assume. Specifically, these roles would include:

1. Living in a home environment.
2. Learning in traditional and nontraditional school settings.
3. Participating in the community.
4. Working.
5. Participating in leisure activities. (Bender & Valletutti, 1982)

To teach secondary students the skills necessary to function as independently as possible in the home, school, community, and at work, educators need to deviate from formal teaching strategies and provide practical community-based training. Many severely disordered children and adults are able to learn isolated skills and may demonstrate these skills in a rather rote mechanical fashion. This restricted use of learned skills and lack of generalization is in part the failure of the educational system more than student failure. If the student is to function at any level of independence, our concept of education must expand beyond the isolated school setting to the community. Also important within the educational program are the specific teaching components. Following an examination of individual roles, prioritized curricular areas could include (Schopler & Mesibov, 1983):

1. Social/sexual skills.
2. Practical living.
3. Leisure time skills.
4. Vocational education.
5. Functional academics.

Given the deficits inherent in most severe disorders, it is understandable that social skills training would be paramount in the curriculum. Since these students do not read social situations or know how to respond, these skills need to be directly taught to at least provide social survival skills. Practical living skills are targeted next to include personal hygiene, care and maintenance of self and living quarters, as well as community mobility and use of community facilities. Leisure skill training focuses on direct instruction in appropriate activities to circumvent aberrant behavior and provide productive time use. Vocational training targets vocational skills, endurance, and productivity in competitive, sheltered workshops and work activity centers. Finally, functional academics focus on survival reading skills and every day math use in multiple settings. To set up appropriate educational goals in each curricular area, educators must first determine what skills are necessary to function in a variety of current and subsequent natural environments. Ecological inventories provide a process through which a student must progress to achieve independent functioning. Thus, a step-by-step guide is utilized to teach each specific behavior necessary for appropriate participation. To set up an ecological inventory, a series of steps have been identified (Brown et al., 1979):

Step 1: Delineate the most relevant and functional, least restrictive, current and subsequent school and nonschool environments.

Step 2: Analyze the environments/divide into relevant subenvironments. Delineate some of the most relevant and functional activities that occur in these environments.

Step 3: Determine the skills needed to participate at least in part of an activity and describe possible adaptations that allow or enhance participation.

Step 4: Design and implement instructional programs to teach the skills necessary for participation in chronological age-appropriate activities in natural environments.

When utilizing an ecological inventory, the original plan can be constructed on the performance of a normal peer. From there, the severely disordered students will continually provide diagnostic information as they interact or fail to interact appropriately. At these times, adjustments then can be made in the instructional program. Thus, it is necessary to provide observation and performance recordings to systematically evaluate student progress. An example of an ecological inventory can be found in Figure 3.

Figure 3
Ecological Inventory

Step 1: Current School Environment: Hallway

Step 2: Subenvironment: Locker and area
1. Locate hallway
2. Find locker
3. Locate lock
4. Open lock
5. Open locker
6. Retrieve or put away materials
7. Close locker
8. Close lock
9. Return greeting from peer

Step 3: Skills needed to find locker:
1. Recognition of hallway
2. Identification of locker number
   a. Locker number outlined in red
   b. Match locker number to that on cue card in wallet

Step 4: Instructional program:
1. Peer models how to locate locker and check number on cue card
2. Peer coaches students through steps
3. Peer coaching faded as student independently performs steps
4. Locker number outline decreased until gone
5. Use of locker number card faded as student begins to independently identify number

Additionally, three commercial materials are available to assess severely disordered student skills for determining entry behaviors to goal areas. Although these materials generally screen rote academic and functional skills, they would provide additional information as to student response style.

Adolescent Psychoeducational Profile

Gary Mesibov, Eric Schopler
Division TEACCH, UNC—Chapel Hill, North Carolina, 1984

An adolescent and adult version of the TEACCH program's Psychoeducational Profile measure is used to assess children with severely disordered and related communication handicaps in the range of moderate to severe retardation. The APEP provides a direct assessment of skills (Direct Observation Scale), and evaluation of functioning in the residential setting (Home Scale), and performance in day placement (School/Work Scale). Each of these scales is divided into six functional areas. These are vocational skills, independent functioning, leisure skills, vocational behavior, functional communication, and interpersonal behavior. Evaluators assess specific skills in each area and determine whether the student has the necessary behavior to pass a skill, emerging behaviors, or skill failure. Finally, scores are plotted in each of the six areas to give a developmental profile of strengths and weaknesses. No age scores are given, but evaluators can use the profile to determine goal areas for teaching emphasis and utilize targeted activities.

Social and Prevocational Information Battery—Form T

Larry Irvin, Andrew Halpern, William Reynolds
McGraw-Hill, Monterey, California, 1979

The SPIB-T is a battery of nine tests that measure competencies of community adjustment for mildly to moderately retarded adolescents and adults. The nine domains of knowledge include job search skills, job related behaviors, banking, budgeting, purchasing habits, home management, health care, hygiene, and grooming, and functional signs. Students respond to questions that tap understanding of concepts in a yes-no format. Although the language involved

in questioning may be too complex, this can be broken down into simpler forms. Scoring converts correct answers to percentages which can be compared to individuals of the same age, IQ, or grade. The results can guide educators in providing students with future education or training.

Brigance Diagnostic Inventory of Essential Skills

Albert Brigance
Curriculum Associates, North Billerica, Massachusetts, 1981

The Inventory of Essential Skills was designed for special students at the secondary level. It is used to identify basic skills that have not been mastered, strengths and weaknesses, and instructional objectives. The Inventory has two major parts: basic academic skills and applied skills. The Inventory is criterion-referenced and does not give age or grade scores. It assesses such functional academics as functional word recognition, reference skills, schedules and graphs, forms, math computation, math facts, measurements, and math vocabulary. Applied skills focus on health and safety, vocational skills, money and finance, food and clothing, travel and transportation, and oral communication and telephone skills.

Thus, an analysis of individual abilities, as well as task analyzed home, school and community curriculum, are essential ingredients in a successful educational environment. Specific teaching strategies in these environments will be discussed in the following sections.

Functional Skills Training in the School

This section presents a curricular framework for developing functional learning activities and experiences appropriate to adolescents and adults with severe disorders in the goal areas of social skills, leisure skills, vocational skills and functional academics. Practical living skills will be addressed in the section that follows. For severely disordered individuals, a functional practical education must focus on activities which will meet the demands of the school program and the community.

When teaching functional academics, the mildly handicapped student may benefit from instruction presented through a total task approach (Schopler & Mesibov, 1983). In other words, the task is modeled, the student tries to perform it, and feedback is received on the parts where there is difficulty. For these students, practicing the task correctly allows mastery, and all that remains is generalization. The more severely impaired student may require that the task be taught step-by-step using a task analyzed approach. For these students, an errorless learning procedure is recommended. This includes interruption of incorrect responses and redirection to appropriate responses so the student is engaged in correct rehearsal of a task each time.

Training should include a number of active generalization programming techniques (Stokes & Baer, 1977) to facilitate generalization to new new materials, persons, and settings. The steps here would include:

1. Measuring specific skill usage in at least three settings prior, during, and after training.
2. The use of multiple examples; for example, in color sorting working with the laundry, dishes and cups, and collated papers.
3. Selection of physical and verbal cues that are common to the training setting and to the setting in which the behavior is to generalize. For example, practicing appropriate behavior in the classroom utilizing the exact verbal cues as the hall monitor encountered during 5th period.

Thus, the specific teaching strategies would include a task analysis of targeted skill behaviors, errorless learning teaching procedures, and opportunities for generalization. According to Koegel, Rincover, and Engel (1982), it will be necessary to train other staff members, parents, and community individuals in teaching techniques to maintain acquired skills. Social praise should be paired with other types of reinforcement so that praise will begin to take on value. The eventual goal then is to fade primary reinforcement to social praise, with even further reductions once the student learns the target skill. It must be stressed that behavior change does not occur automatically; instead, it must be systematically programmed.

Goal Area: Social Skills. Severely disordered individuals do not read social situations well and do not incidentally learn specific social skills. Most appropriate social interactions need to be directly taught in each setting. Techniques such as modeling, coaching, and role play, which have been used with other disabilities, also seem to help severely disordered students develop their social skills and interpersonal behavior (Mesibov, 1984).

According to Wing and Gould (1979), there are three types of social interaction patterns in severely disordered individuals. The first of these, social aloofness, describes children and adolescents who are

very severely impaired in social interactions. These students generally prefer to be left alone, although some may make approaches to obtain things they want. The second group of individuals are described by their passive interactions. These young people rarely initiate social contacts but readily accept them. They can be easily drawn into activities. The third group of individuals are described by their active but odd interactions. These children and adolescents participate socially, but they do not know how to do so, so their interactions appear inappropriate. A more complete description of these patterns can be found in Figure 4.

Figure 4
Social Interaction Patterns

Social Category	Characteristics	Social Skills Training
Socially aloof	Prefer to be left alone. Initially need physical posturing to comply. May be tactually defensive. Inappropriate eye contact.	Physical posturing and/or guided peer tutors to: Accept the proximity of others. Give and receive objects. Request help. Take turns. Indicate wants and needs. State no appropriately. Make choices. Not take food or possessions of others.
Passive	May initiate to adults to express wants and needs. Rarely initiate to peers. Can be led into activities. Are open to physical or social contact.	Structured social skills interactions training utilizing modeling and practice in: Greetings. Requesting help. Joining in. Joke telling. Pat conversation topics. Playing games. Listening. Introductions.
Active but odd interaction	Initiate conversations with questions. May tease, name call, or state inappropriate things to initiate conversations. Try to refocus conversations on their interests (time, signs, maps, death or horrific themes). Difficulty understanding consequences, problem-solving, drawing conclusions. Do not understand social distances or rules on taboo subjects. May state desire to have friends but aren't sure how to initiate and join in.	Structures social skills training in: Social distances. Appropriate topics of conversation. Dealing with teasing. Stating a compliment/ complaint. Sex education. Self-control. Making a decision. Asking appropriate questions. Problem-solving. Inhibiting odd behavior. Positive self-talk.

In planning social skills programs, the teacher must first examine the characteristics of the students. In addition, the form and function of the student's behavior must be assessed. If a student is socially aloof, social skills training will involve not only teacher modeling, but also physical posturing. In other words, a student will need physical assistance to carry out a skill. As progress is made, assistance is faded, but rarely do these students independently carry out a skill without a verbal or physical cueing

system. Students who exhibit passive interaction respond well to peer tutors. In small group sessions (4-5 students to a teacher and aide), these students respond to training where skill steps are listed, modeled by the teacher, practiced with coaching from a peer or teacher, modeled again, and then tried in natural environments with peer or teacher coaching. Verbal coaching cues then can be faded or transferred to written cue cards to be carried in a purse or wallet. Then, if the student needs a reference, he/she can independently (or when cued) look up skill steps on the card. An example of a step-by-step simple conversation follows:

Starting a conversation

1. Look,
2. Say, "Hi! How are you?"
3. Wait.
4. Say, "How 'bout those Hawks?"

For students that are already involved in interactions, social skills training emphasizes techniques for problem-solving and self-talk procedures. Again, these students need to be involved in role play situations and will need coaching to transfer learned skills to actual environments. They need written cue cards for reference in difficult situations. It is also important to keep abreast of social difficulties. A student may have learned to respond to teasing when called a "Nerd" but doesn't generalize the plan when called a "Conehead." So, reteaching will be necessary. Two excellent references for teaching social skills training for this population are Skillstreaming the Elementary School Child (McGinnis & Goldstein, 1984) and Skillstreaming the Adolescent (Goldstein, Sprafkin, Gershaw, & Klein, 1980). Although these references may need to be revised somewhat for higher functioning students, they offer an excellent skills sequence for teachers. Additionally, "active but odd" students need to look at the consequences of their behavior as well as specific problem-solving strategies. This is best presented in written form (see Figures 5 and 6).

Figure 5
Inappropriate Social Behavior

Behavior: Screaming "No-No" when I don't get what I want

	Now (Immediately)	Later today (9:00 p.m.)
Good Results	Tell people what I want	X
Bad Results	Go to time out	Lose pay for missed time

Figure 6
Problem Solving Plan

Step 1: What is the problem?
- A. Who?
- B. What happened?
- C. Where?

Step 2: Show to the teacher

Step 3: Things to do:
- A.
- B.

Step 4: Pick one

Step 5: Do it

Step 6: Reward myself with _____ .

With teacher assistance, the high functioning severely disordered student can start to look at his/her behavior objectively as well as develop plans for self-control or more appropriate behavior. These students will need to be guided through these plans with each new problem as they do not generalize well and have poor judgment with the problem-solving plan. The individual can independently define the plan, but at Step 2 ask a teacher for assistance in brainstorming solutions. The use of a problem-solving plan

provides a structured format for the student to follow and also gives a written record of plans.

With all social skills training, the key to growth is direct teacher instruction. Severely disordered students are not incidental learners who can imitate and apply new skills. They need to have social skill steps listed, demonstrated by the teacher, practiced repeatedly, and rehearsed in each new setting. Even then, many students will not spontaneously use their skills but will require verbal or written coaching. However, this type of training does increase the student's repertoire of appropriate interactions and provides greater opportunity for increased school and work experiences and training (Gaylord-Ross et al., 1984).

Goal Area: Leisure Skills Training. Frequently, severely disordered individuals have an abundance of leisure skill time but have not developed the necessary skills to utilize their free time creatively or constructively. Often these individuals flit from one activity to another, marginally participating, and eventually go back to selfstimulatory or self-abusive behavior. Although some work has been done in this area of leisure skills training, there are a limited number of curricula available. The research does indicate that individuals who constructively use their leisure skills time are less likely to exhibit aberrant behavior (Wehman, 1983). Further justification for leisure skills training indicates that recreational activities provide opportunities for the severely disordered student to learn to adjust to the demands of society. Also, training will enhance motor and domestic development. Finally, the development of leisure skill behavior and participation in social activities will lead to expanded social contacts, increased interaction skills, and the abilities to get along with others, share, compete, cooperate, take turns, and, in general, make a more satisfactory social adjustment (Wehman, 1983).

As with social skills training, severely disordered individuals require systematic instruction in leisure skills to participate appropriately. Even after a severely disordered student has acquired a skill, without instructional strategies in a variety of environments they may never generalize, maintain or self-initiate the skills. Leisure skill training includes assessing the leisure skill competencies of the individual, careful selection of materials and skills for instruction and implementation of techniques or specific training methods in the acquisition and maintenance and generalization of skills. The most effective way to teach a recreational activity is to break the skill down into small component parts. First, the teacher or peer would model the skill. The components of the task would then be through backward chaining, in which the teacher or peer performs the initial steps, or the individual is physically or verbally postured through the activity. Then, the severely disordered student performs the final step(s) independently. That way they would still be involved in the correct rehearsal of the leisure skill each time. As the student gains mastery, physical prompts would be faded to verbal and finally independence. To summarize, a teaching sequence for leisure skills training would include: 1) modeling, 2) physical guidance, 3) verbal prompting, and 4) independent responding.

Some individuals will not be able to participate fully in a leisure skills activity because of physical or cognitive limitations. However, these students may be able to partially participate in the skill. The principal of partial participation may involve modifying or adapting materials, such as putting a collapsible handle on a bowling ball. Activities or rules may need to be simplified, such as playing "UNO" without the Reverse and Skip cards. Leisure skills activities can be modified to allow the individual to enjoy some degree of participation. Figure 7 presents a listing of leisure skills activities. The main goal is to teach the students skills which they can perform as independently and skillfully as possible.

Goal Area: Vocational Training. The purpose of school is to prepare an individual for a job and the least restrictive living situation. Therefore, training should begin at school entry. In teaching vocational skills, four components should be incorporated: 1) task analysis, 2) partial participation, 3) backward chaining, and 4) errorless learning procedures. The first component in teaching a vocational task is to delineate the steps involved through a task analysis to facilitate standardization of task presentation. This is extremely important to severely disordered students who react negatively to change. Secondly, all severely disordered students, although they may not be able to carry out an entire job, can do some parts of a job. This still allows them partial participation. When teaching a job, backward chain the individual steps. In other words, perform or have another student perform the beginning steps of a job with the student completing the final step(s). That way, the student can remain involved in the activity and also rehearse the correct skill each time. Finally, errorless learning procedures guarantee correct client response. Again, with severely disordered students who don't problem-solve well, this eliminates confusion in learning.

With these program components established, vocational training programs can be developed to begin to teach a hierarchy of skills starting at the preschool level and continuing through high school. These skills, adapted from Ziegler, Herrle, and Jarvis (1981), are arranged in Figure 8 with examples.

Figure 7
Leisure Skills Activities

Playing games	Physical fitness	Outdoor activities	Nature study
Ping pong	Jumping rope	Fishing	Care of pets
Pool	Bicycling	Wood gathering	Fish
Foos ball	Roller skating	Operating camping	Reptiles
Shuffleboard	Ice skating	equipment	Birds
Darts	Skate boarding	Use a compass	Cats, dogs
Marbles	Swimming	Camping	Small mammals
Dominoes	Diving	Nature walks	Horses, cows,
Twister	Snorkeling	Beach combing	goats
Operation	Rowing	Bird watching	Gardening
Dodgeball	Canoeing	Rockhounding	Plant care
Keep away	Motoring	Cave exploring	Terrariums
Frisbee	Skiing		Ant farm
Croquet	Sledding		
Concentration	Tobogganning		
Go Fish	Hiking		
UNO	Climbing		
Hearts	Rappeling		
Bingo	Obstacle course		
Lotto	Calisthenics		
Sorry	Fast walking		
Trouble	Jogging		
Battleship	Tumbling		
Scrabble	Aerobics		
Simon	Weight lifting		
Pinball	Yoga		
Electronic games	Karate		
Racing games	Badminton		
SPUD	Bowling		
Table hockey	Baseball		
Jarts	Shooting baskets		
Pick-up Stix	Volleyball		
Connect Four	Kickball		
	Track & field		
	Trampolining		

Independent activities	Arts & crafts	Public entertainment
Photography	Cooking	Interviews
Little Professor	Holiday decorations	Newscasts
Collections	String art	Sports
Stamps	Macrame	Music
Pictures	Batiking	Movies
Autographs	Decoupage	Plays
Newspaper clippings	Knitting	Museums
Coins	Sewing	Art galleries
Buttons	Braiding	Libraries
Matchbook covers	Models	Fairs
Art	Drawing	Parks
Magazines	Stenciling	Botanical gardens
Catalogs	Block printing	Religious services
Maps	Silk screening	Rides in the car
Radio	Painting	Dining
TV		Shopping

Vocational Skills
Figure 8

Skill	Examples
I. Sorting	
A. Object to object	Plates & cups, silverware, clothing, construction materials
B. Object to picture	Setting the table with placemat pictures, matching construction materials to a picture
C. Object to outline	Following outlined circuit board patterns
D. Single digit numbers	Sorting nuts and bolts by numbers
E. Multiple digit numbers	Sorting mail by zip codes
F. Single letters	Readiness to mail sorting
G. Multiple letters	Placing cards in library books
II. Alphabetizing	
A. Single letter	Simple filing
B. Letter sequences	Clerking duties in filing
III. Assembly	
A. Two parts	Film in canisters, pop cans in carton
B. Four parts	Lamps, harps, pens
C. Multiple parts	Circuit boards
IV. Collating	
A. Two sheets	Compiling and stapling handouts
B. Four sheets	Compiling and stapling tests
C. Multiple sheets	Compiling and stapling handouts
V. Packaging	
A. Two parts	Pills in a container
B. Four parts	School lunches
C. Multiple parts	Factory material packaging
VI. Sequences Jobs	
A. In room	Cleaning the fish tank, bathroom
B. In school	Picking up lunch slips, running ditto machine
C. In community	Preparing salads at a restaurant

As with other types of training, vocational training can proceed in three phases—first in the classroom, expand to the school, and finally into the community. Extensive coordination by the teacher with school personnel, students and community members will be necessary to designate jobs, teach the skills, reinforce them, manage behavior and increase independence. Examples of jobs found in each site are listed in Figure 9.

Vocational counselors, rehabilitation counselors, job placement interviews, and employers have suggested that the best way of preparing an individual for work is through on-the-job training (Bender, 1982). Generalization of skills and job success will only be assured if training takes place in the natural environment. Thus, vocational training must be responsive to the needs of the community, since that is where the individual will be placed. A model (Mithaug, 1979) for vocational training assessment is comprised of the following steps:

1. Survey potential job placements in the community (Competitive employment, sheltered workshop, work activities).
2. Select probable placement (Given the functional level and the behavior of the individual).
3. Assess job requisites for vocational placement (Some workshops require the client to be ambulatory

Jobs Found in Typical Environments
Figure 9

Phase I.	Classroom Jobs	
	Sort pop cans	
	Collate and staple tests	
	Sort snack materials	
	Assemble memo pads	
	Room chores—dust, run errands, clean chalkboard, empty trash	
	Flashlight, pen, lamp, harp, radio, brake assembly	
Phase II.	School Jobs	
	Collect absence and/or lunch slips	
	Run ditto machine	
	File Place cards in library books	
	Package lunch bags	
	Serve lunches	
	Clean up in cafeteria	
	Load pop machine in teacher's lounge	
	Clean bathrooms, teacher's lounge, sweep floors	
	Put away gym equipment	
	Record and compile sports stats	
Phase III.	Community Jobs	
	A. Work activities	Sorting skills
	B. Sheltered workshop	Assembly Packaging Microfilm proofing Line jobs
	C. Semi- and independent competitive	Stock clerk Janitor Maid Line jobs Typist Clerk Mail thrower

or toilet trained.).

4. Assess student competencies (Strengths and weaknesses, splinter skills, behavior characteristics).
5. Specify instructional objects (Teaching goals).
6. Select training materials.
7. Identify instructional tasks for skill acquisition (Task analyze the lesson).
8. Identify behavior management tactics for worker-behavior training (Reinforcement, cueing, prompting).
9. Conduct job try-out.
10. Evaluate teaching effectiveness and modify.

In competitive settings, an intense support system must be provided. For this type of training, the teacher or another professional must be responsible for the individual's complete adjustment. The steps in this training include (Levy, 1983):

1. Finding and securing a job.
2. Learning the job and requirements.
3. Developing a complete task analysis of the job including actual tasks and routines involved (see example, Figure 12).

4. Introducing the handicapped individual to the job.
5. 1:1 on-the-job training.
6. Once the job is learned, teaching of job routine.
7. As the worker starts to produce, fading help.
8. Fading help; supervisors and co-workers increase involvement.
9. Once the worker is independently functioning, checking in daily, fading to every other day.
10. Finalizing permanent employment.

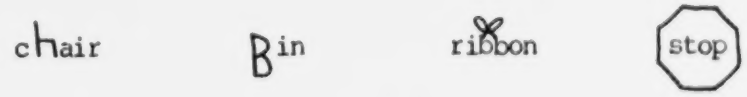
In addition to direct on-the-job instruction, teachers may need to provide the task analysis in visual form. For students that read, this serves as a check-off list and provides for independent functioning. Additionally, since problem-solving skills are difficult, visual cues may need to be implemented, such as a line for measuring liquids, a start and finish sign on a cleaning sequence, or a designated number of window washer sprays.

In summary, vocational training needs to begin the day the individual starts school. Teachers need to break down skill hierarchies, model responses, provide opportunities for at least partial participation, and conduct on-the-job errorless learning experiences. Communities provide vocational opportunities in work activities centers, sheltered workshops and competitive employment. The severely disordered student, therefore, should be gainfully employed in one of these settings.

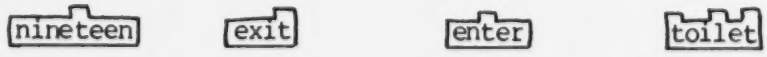
Goal Area: Functional Academics. To function successfully, students must acquire some community skills in the areas of reading, writing, and mathematics (Bender & Valletutti, 1982). The applicability of learning in each of these areas is determined by how meaningful it is. Many students can learn reams of rote skills, but only useful real life skills will service them. In looking at materials and lessons in reading, writing, and mathematics, teachers should ask themselves the following questions (Donnellan, 1984):

1. Of what functional use is this skill for the individual?
2. How often will the individual have a need for this skill?
3. Is this activity necessary to prepare students to function in community settings?
4. Could students function as adults if they did not acquire the skill?
5. Are the skills, materials, tasks, and criteria similar to those needed and encountered in adult life?
6. Does someone perform the task if the student does not perform it?
7. Will the living situation provide for maintenance of this skill?

Reading. In reading skills, the majority of severely disordered students will learn utilizing a sight word approach. If individuals are going to be phonetic readers, this will appear within several weeks. The majority of severely disordered students do respond best to intra-stimulus prompting (Koegal, 1982). In other words, cueing procedures contained within the materials will be more helpful than other types of prompts. An example of intra-stimulus prompting can be found below:



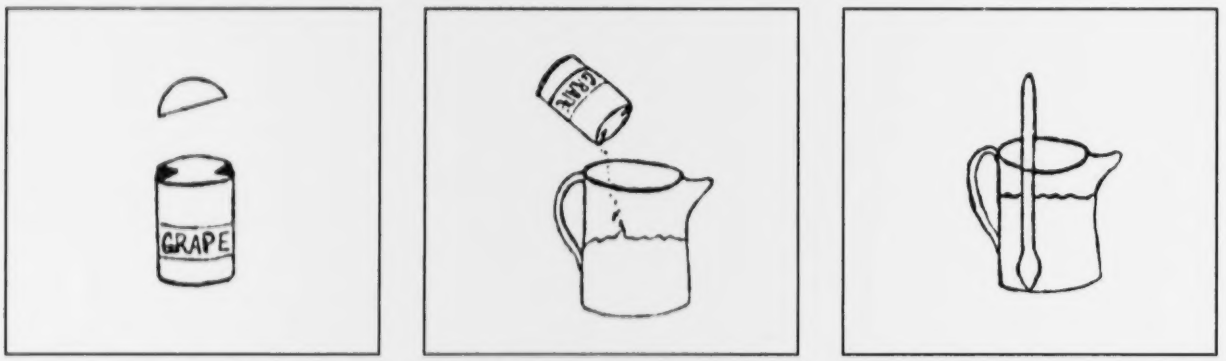
Each within-word cue offers help in identifying the word and will provide meaningful information to the reader. As mastery is achieved, these visual cues can be faded. Disordered individuals also appear to read words based on their formation. Again, teachers can capitalize on this by providing further visual cues.



This draws the reader's eye across the word and allows whole word recognition. Again, these cues can be faded as mastery is achieved. When teaching reading skills to severely disordered students, never present words in pairs. This only serves to confuse the reader and frequently learners will then assume EXIT and ENTER are one EXIT-ENTER. Again, for reading to be meaningful for these students, they will need to experience what they are reading. Basal readers, although they may be sight read by some high functioning students, are only a rehearsal in word calling skills.

In presenting a hierarchy of reading skills, teachers may need to set the foundation of any reading program by labeling the common objects in the environment so the students can read and utilize them and introduce language experience stories. With experience stories, the student and the teacher can read a three part story, do it, and come back and sequence the events. Having lived the story, the reading then becomes meaningful. For example:

1. Open Koolaid
2. Pour in pitcher
3. Stir with spoon



Several sources of functional reading curriculums have been surveyed. Figure 10 presents a compilation and modification of sight word teaching procedures presented in a hierarchy by difficulty (Engelman, 1976; Lichtman, 1974; San Marcos, 1982; Scott-Miller, 1986).

Hierarchy of Sight Word Procedures
Figure 10

Level 1: Labeled Common Objects
Language Experience Stories

Level 2: Signs and Labels
Simple Recipes
Menus

Prioritized Common Sign Reading List

Go	Warning	No Swimming
In	Toilet	Wet Paint
Out	Keep Out	No Admission
Hot	Gentlemen	Emergency Exit
Men	Telephone	Fire Escape
Stop	Restroom	Do Not Touch
Exit	Push—Pull	Do Not Enter
Wait	First Aid	High Voltage
Walk	Dangerous	Beware of Dog
Police	For Sale	Watch Your Step
Women	Bus Stop	Employees Only
Danger	Hands Off	No Trespassing
Poison	Fire Alarm	First Aid Station
Ladies	Don't Walk	

Level 3: Road Signs
Clothing Tags
Medicine Labels
Billboards

Level 4: Schedules and Tables
TV Guide
Bus Schedule
Work/School Schedule

Level 5: Maps
City/Street/Road
Weather
Directions

Level 6: Yellow Pages
Want Ads
Categorized Listings and Indices
Applications

Level 7: Food Store Ads
Magazines
Illustrated Ads

Level 8: Banking Forms
Fill-in Blank Form
Hospital Entry Form

Level 9: Use of Tools
Sewing with a Pattern

Level 10: Insurance Policies
Apartment Lease
Sales Contracts
Technical Documents

Mathematics. As with reading, mathematics needs to be meaningful in order for severely disordered students to utilize skills in this area. At the secondary level, money and calculator use, along with measurement, should be the main thrust of the mathematics program. Elements of this program, adapted from Quinn and Beisler (1986) and Bender and Valletutti (1982), are outlined as follows:

Using Numbers

Identification of one and many
One-to-one correspondence to 10
Quantity concepts to 100
Number recognition

Basic Computation

Addition, subtraction, multiplication, division
Calculator use

Using Money

Sorting coins
Matching coins to pictures—vending machine card
Coin identification and value
Checking prices
Making purchases
Using a pay telephone
Sources and use of money
Postage

Time

Recognition of digital time
Recognition and use of a clock face
Following a schedule (picture or written)
Using a calendar
Setting a kitchen timer
Using and setting an alarm clock

Measurement

Using a combination lock
Solid measures (ruler, tape measure)
Liquid measures (measuring cup, quart, pint, measuring spoons)
Map use
Measurement/growth—scales, height measure
Medication dosages
Clothing size
Thermometer
Setting a heating dial

Savings/Banking

Check writing
Savings
Paying bills
Budgeting
Spending Borrowing

Writing Skills. Writing skills are taught so that the severely disordered student can relay information. Most importantly, the students should be able to write their name. If additional skills can be taught, these would include address and phone number. From here, the student can learn to complete forms and applications. With more advanced students, short messages, invitations, and letter writing can be introduced. If the student is having difficulty with writing skills, use of a computer and printer or a typewriter should be investigated.

In summary, the information provided in this section focuses curricular programs on useful life skills. For severely disordered students to use and generalize information, lessons and material need to be meaningful and applicable to everyday life. Specific teaching strategies such as errorless learning procedures, lesson task analysis, and backward chaining will provide optimal learning opportunities, but the daily applicability and usefulness of the program is the key to success.

Functional Skill Training in the Home

As students with severe disorders learn to function in school and in the community, they still must fulfill their role as residents in a home. To function as effectively, efficiently, and safely as possible, these individuals must engage in a variety of practical reading, writing, and mathematics activities. A typical home is replete with tasks requiring application of these functional processes (Bender, 1982). Thus, it is imperative that the parents or houseparents actively participate in the student's education by teaching at home, assisting with generalization, programming and volunteering at school.

To understand the range of functional demands in the home, an analysis must be made of the multiple tasks of daily living. The automatic nature of many of these tasks, to those that have mastered them, masks the process of steps defining them. To effectively teach these tasks, it would be necessary again to conduct an ecological inventory to delineate the steps for appropriate training. As with other types of skill training, disabled individuals need to participate, at least partially, in home skills that are backward chained, taught by errorless learning procedures, and use faded prompt hierarchies.

With individuals that have severe disorders, sequences of steps and time periods are often confusing. Many parents and houseparents have found it helpful to either task analyze domestic living skills, or set up daily schedules in written or picture form. Many individuals, although they cannot read and understand face clocks, do comprehend digital times and, thus, can follow these types of schedules. It also is helpful to utilize kitchen timers which offer both a visual and auditory cue to time periods.

Domestic living skills can be broken down into levels based on the individual's ability. As handicapped people master skills, they then can move on to more complex domestic living activities with increasing independence. The following activities are adapted from Maver et al. (1979):

Level I:

A. Practicing routine activities as they occur in the home

B. Initial understanding of nutrition
   - Indicating eat, drink or want
   - Getting a prepared drink or food out of the refrigerator
   - Utilizing utensils during eating

C. Increasing independent performance of personal hygiene, although still assisted
   - Pulling pants up from knees
   - Dressing with help for fasteners
   - Toileting on a scheduled basis

Level II:

A. Participating in home maintenance
   - Sorting the laundry and washing
   - Setting and clearing the table
   - Vacuuming and dusting
   - Preparing sandwiches, cereal, and simple meals
   - Folding and putting away clothing

B. Increasing personal awareness in nutrition and family life
   - Independent toileting and bathing
   - Taking the correct medicine on a schedule
   - Participation in wellness programs such as jogging on a scheduled basis

Level III:

Identify the need for an activity; planning, initiating, participating, and terminating the activity
- Making up a shopping list, going to the store, paying, and bringing the food home
- Following a simple recipe in meal preparation
- Determining an illness, taking a temperature, and calling a doctor
- Reading the TV Guide, locating the time and channel, enjoying the program

Thus, it is essential that parents and teachers work together on domestic living skills in a natural environment. Through direct instruction, handicapped people can participate as contributing members of a household. When these individuals do function as independently as possible to assist in running their home, they gain positive feelings of self-worth.

Functional Skills Training in the Community

More recently, instructional emphasis has been placed in teaching ecologically valid skills that prepare students to function more independently in nonschool, domestic, vocational, recreational/leisure, and community environments (Brown, et al., 1979; Nietupski, et al., 1986). Teachers are taking students into the community for skills training. Community-based training, when compared to simulated instruction, has proven to be more effective both in terms of length of acquisition and maintenance of learned skills (Coon, Vogelsberg, & Williams, 1981; Freagon & Rotatori, 1982; Nietupski, Hamre-Nietupski, Clancy, & Veerhusen, 1986).

Researchers have delineated several reasons for adapting natural environments for training (Ford & Mirenda, 1984; Nietupski, et al., 1986):

1. The problem of transferring stimulus control from the simulated setting to the natural environment is reduced.
2. Persons indigenous to the handicapped individual's environment are exposed to and perhaps involved in the teaching, thus increasing the likelihood of facilitative interactions even when formal training is not in effect.
3. When training occurs in natural settings, the generalization programming from artificial reinforcers to natural consequences would be unnecessary.
4. In vivo, instruction is more cost effective in the long run since community instruction may be needed despite the simulated training already provided.

Most community-based training has employed task analysis as the major component of the teaching program. With task analysis, teachers then can conduct training utilizing isolated skill training, forward and backward serial chaining, or a whole task approach (Snell & Browder, 1986). In looking at the community skill of riding the public bus to work, teachers can apply all three approaches. Isolated skill training teaches one skill in the activity to criterion. If the targeted isolated skill is riding the bus without any handflapping, the teacher will instruct the student initially through verbal cues and then gestures to place his/her hands in the back pockets. Forward and backward serial chaining involves teaching one step at a time starting at the beginning or end of a sequence. Thus, the process of finding the bus stop, waiting for the bus, boarding, placing the correct change in the meter, riding the bus, and debarking at work would be modeled by the teacher and practiced by the student. Finally, the whole task approach teaches chunks of an activity in the order in which they occur. If the student is having particular difficulty in boarding the bus, this skill would be further task analyzed and repeatedly modeled and practiced.

In the natural environment, if correct responding is not maintained through natural consequences, teacher intervention is required. Therefore, teachers must analyze specific problems and determine the following (Ford & Mirenda, 1984):

1. Errors made in the community which may be attributed to a failure to respond to natural cues.
2. Whether to allow a natural correction to occur.
3. The relevant natural cues and their salient cues.
4. The types of teaching and reinforcement procedures to use in the community.
5. Methods for fading instructional cues.

Initially, the first step involved in redirecting correct responding is to conduct a nonhandicapped person's inventory which again gives a sequential listing of skills. This would enable teachers to:

1. Ascertain which skills are required of persons who generally engage in a particular activity.
2. Determine the natural order of skills and make modifications for the handicapped person.
3. Prepare a criterion-referenced assessment tool against which performance can be measured.

Frequently, when working on community-based skills, reinforcers used in the classroom are not acceptable in community settings. Two alternative types of reinforcement have been researched by Goetz, Gee, and Sailor (1985) and Hanley and Jones (1982). Goetz, et al. indicated that the opportunity to continue an ongoing behavior sequence after it had been interrupted could be reinforcing. In their research, teachers interrupted students as they performed a skill and asked them to communicate their desire to complete the skill by pointing to a related picture. Haney and Jones incorporated self-reinforcement into community training by requiring handicapped individuals take a piece of candy from a bowl upon correct execution

of a skills sequence. Teachers can make this even more functional by allowing students to eat a candy bar after a shopping trip or keep the change from a bus ride.

Finally, guidelines for the design of community-based training, adapted from Snell and Browder (1986), can include the following:

1. Defining the skill selection process used.
2. Ensuring that the skills targeted have both social and empirical validity.
3. Justifying the process used to analyze the skill into teachable behaviors and to order the task for instruction.
4. Describing and justifying the procedure to present and sequence training trials.
5. Including a means for teaching difficult steps.
6. Incorporating into the reinforcement, prompting error corrective methods procedures that yield a high proportion of correct responses, that are socially valid in the community, and that have correspondence to the natural stimuli in the community and, thus can be faded.
7. Measuring the targeted skills under realistic, noninstructional conditions in the criterion setting, while also ensuring the client's safety.
8. Measuring the targeted skills frequently enough before, during, and after intervention to draw conclusions about the functional relationship between the intervention and corresponding changes in the behavior, but not so often that learning is impaired.
9. Identifying and measuring collateral behavior so that intervention may be expanded or reduced as necessary.
10. Training in those community settings and at those times for which the target skill is intended.

ISSUES AND PROBLEMS

The curriculum model presented in this chapter contains elements that, based on currently available evidence, will provide the activities and teaching tasks that will enable severely disordered individuals to function as adults in the least restrictive settings. The curriculum reflects a belief that the skills necessary for independent functioning in any setting, whether social, academic, or leisure behaviors, are best learned in the natural environment. However, there are problems in the implementation of the curriculum that are inherent in this approach.

Scheduling

The elements of a functional curriculum model require that many other personnel and environments be coordinated for effective implementation. For example, infusing handicapped awareness information into the curriculum of nonhandicapped students requires ongoing contact with regular education teachers or other school personnel to insure the delivery of content material. Determining not only the most useful information for presentation, but also the most effective delivery system, will require that the teacher of severely disordered students have a good knowledge of both the nonhandicapped student population and the teachers in the particular school. Implementing "Special Friends" or peer initiation interventions demands that the teacher work closely with other instructors to develop ideas and work out opportunities for social contact within the confines of often rigid school schedule. In many instances, it is possible, at the secondary level, to use Study Hall periods for this purpose. Other teachers have developed, in conjunction with social studies teachers, arrangements whereby nonhandicapped students receive school credits for participation in these programs.

Functional training activities in the school, home, and community also present unique problems to the teacher of severely disordered student. In particular, community-based instruction usually poses challenges in scheduling. Before students can be removed to community sites for instruction, the teacher must coordinate several activities, including transportation, supervision of students, and development of community training sites and activities. Transportation generally involves arranging for a school bus or using personal vehicles, the latter involving a question of liability. This potential problem can generally be overcome easily by securing a commitment from the school district that community-based instruction is a necessary part of the students' curriculum. Supervision of students in the community, in addition to those who remain in the classroom during community sessions, is often accomplished through coordination and cooperation with other special education teachers in the building.

Scheduling problems and related issues are probably the major reason for failure to adopt many of the procedures and processes involved in a functional program for severely disordered students. The curriculum requires teachers to not only change the emphasis of training but also deviate considerably

from a strict classroom format in delivery of instruction. This process of change, although initially time-consuming and fraught with administrative problems, can be highly rewarding to the teachers and students.

Practice Trials

An issue that continues to be of concern to teachers who are considering functional teaching strategies in natural environments is how to deliver the number of training trials necessary for acquisition of skills. For example, we know that severely disordered students learn most efficiently and effectively when allowed to perform the new behaviors repeatedly over time (Simpson, Sasso, & Horton, 1986). It is also true that getting students into natural environments for this necessary practice is often problematic. A viable solution to this dilemma is to combine massed practice trials in the controlled classroom setting with home and/or community-based sessions. For example, a home self-care program in a bathroom subenvironment for handwashing skills could be repeatedly practiced in the classroom and concurrently learned in the natural home setting.

Interfering Behaviors

The issue of the appropriateness of training in the community with students who exhibit high frequencies of self-stimulatory, aggressive, disruptive, or self-injurious behaviors is often difficult to overcome. Some professionals advocate continued community training programs for these students regardless of the level or severity of inappropriate behavior. The rationale is that the excess behaviors, like skill deficits, are best handled in the natural environment. Additionally, they recommend using only procedures which would be acceptable within these environments. Closely tied to this issue is a conviction that no punishment of any type should be used with severely disordered individuals (Donnellan, 1986). However, there are many more factors to be considered in any decision concerning aberrant behaviors. One important factor concerns the attitudes and resulting behavior of the nonhandicapped persons in the community. If you agree with the literature which suggests that initial contacts must be positive and believe that, in the long term, the successful inclusion of severely handicapped people in normalized environments ultimately depends on community attitudes, then teaches should be cautious in their decisions concerning training. There appears to be a fairly widespread underlying belief that the nonhandicapped population is or should be more tolerant of threatening forms of behavior from severely handicapped individuals. Although increased levels of tolerance in the community would indeed be welcomed by those involved with severely handicapped persons, it simply does not exist. If a child "spits" on others at a high frequency, that child is not going to be accepted whether he is gifted or severely disordered.

It is the conviction of the authors that grossly inappropriate aggressive and self-injurious behaviors should at lest be under a degree of stimulus control prior to the initiation of integration activities and community training. If we are to continue to receive support for severely disordered students, we must ensure that these students are not perceived as a threat by the community.

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The Iowa Program Standards For Interventions In Behavioral Disorders

SECTION FIVE:

REINTEGRATION PLAN

Chapter 11: GENERAL CONCEPTS

Chapter 12: GENERALIZATION AND MAINTENANCE

Chapter 11

REINTEGRATION PLAN: GENERAL CONCEPTS

Al Burrows
Consultant, Behavioral Disorders
Des Moines Independent Community School District
Des Moines, Iowa

Lynda O'Meara
Consultant, Behavioral Disorders
Des Moines Independent Community School District
Des Moines, Iowa

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Chapter 11

REINTEGRATION PLAN: GENERAL CONCEPTS

Al Burrows
Lynda O'Meara

PROGRAMMING FOR BEHAVIOR DISORDERS: REINTEGRATION

Public Law 94-142 (P.L. 94-142) mandates the inclusion of at least two elements of programming for students with special education needs. These are: (1) placement in the least restrictive environment and (2) the development of an individual education plan (IEP). These two elements clearly support the need to develop a reintegration plan at the time the student is staffed into a special education program.

The need for early development of a reintegration plan arises from the requirement that identified students be placed in the least restrictive environment (Chicola & Sager, 1983; Deno, 1978; Heilman, 1982; Kerr & Nelson, 1983; Levin & Dowda, 1980; McCauley, 1984; Smith, 1978). Placement decisions based on the least restrictive environment mandate should be based on a comprehensive look at how the child's needs and abilities match available placement options (Hoeltke & Toker, 1977). These decisions require a look at the educational environment's structure, expectations, and degree of flexibility within the school settings, as well as the characteristics of the student (Epps, 1985; Fowler, 1978; Huntze & Werner, 1982; White, 1979, 1980). Upon completion of this comprehensive assessment, the staffing team will attempt to make a "good match(es)" between the student and the classroom environment(s) (Fowler, 1978; Huntze & Werner, 1982; Masat, Ledebur, Azzara, & Marotz, 1980; McCauley, 1984). In addition, behaviors which may have impeded a child's success in regular education environments should be specified, and programming to remediate such behaviors should be planned (Huntze & Werner, 1982).

The student's IEP should state the behavioral, social, and academic goals and objectives to be attained by the individual child. These goals are developed following a comprehensive assessment of the child's behavior in the regular education environment (Smith, 1978; White, 1979, 1980). It is assumed that if the goals and objectives stated in the IEP are mastered, then the child will be better able to succeed within the regular classroom environment, opening the door to eventual reintegration (Huntze & Werner, 1982; White, 1980). In this sense, by developing the IEP, the staffing team is initiating the process of reintegration (Epps, 1985; Hoeltke & Toker, 1977; Huntze & Werner, 1982; McCauley, 1984; White, 1979).

Special education programming within the least restrictive environment does not end with the initial placement staffing. Each child's special education program must be reviewed at least yearly. Additionally, at least once every three years, the child should receive a comprehensive re-evaluation. As part of these annual and three-year reviews, the current placement is reviewed in terms of the child's current functioning. A new IEP is developed reflecting current needs and programming options. If the child has made sufficient progress, programming within some regular education environments may be appropriate (Hoeltke & Toker, 1977; Huntze & Werner, 1982; Lister, Hoeflich, & Edwards, 1983; Oaks, 1979; White, 1979, 1980).

Reintegration is the ultimate goal of special education programming. Special education is not necessarily "for life." Special educators seek to return students to the regular classroom environment as soon as possible (Epps, 1985; Huntze & Werner, 1982; Lister et al., 1983; McCauley, 1984; Smith, 1978; Smith, White & Peterson, 1979). If this goal is taken seriously, reintegration efforts will not be left to chance. A plan will be developed which defines reintegration, delineates procedures, and assigns responsibilities necessary to accomplish it expeditiously and effectively (White, 1979, 1980). A model for such a plan is offered within this chapter. The proposed plan is a model one: one that reflects "best practice." Differing home and school environments exhibiting unique circumstances will, of course, necessitate adaptations of the plan.

There are two basic principles upon which the model reintegration plan is built. The first principle is that the regular education environment must be perceived as a "training ground" (Masat et al., 1980; Rhode, Morgan, & Young, 1983). The short term goal of special class placement is to enable the child to develop a new behavioral repertoire within the isolated special education environment (Fowler, 1978). However, generalization of newly-learned behaviors to other settings will not happen automatically and must be taught (Epps, 1985; Fowler, 1978; Kerr & Nelson, 1983; Rhode et al., 1983; Smith, 1978; Smith et al., 1979; White, 1979, 1980). Therefore, the teaching and reinforcing of the desired behaviors also must occur within the regular classroom environment as soon as possible. Then, once the more appropriate behaviors have generalized to other school environments, the challenge of maintaining them there begins

(Masat et al., 1980). Maintenance of newly-acquired behaviors does not happen automatically either. Teaching and reinforcing the desired behaviors within the regular education environment is also necessary (Smith et al., 1979; White, 1980). What must be instituted is extended treatment not only within the special class, but within the regular environment as well.

Successful implementation of the generalization and maintenance sections of the reintegration plan is difficult. Special training will need to be provided for students, teachers, and administrators. Many regular education teachers and administrators feel that they have not been trained to work with behaviorally disordered students, nor do they feel comfortable doing so. It is the responsibility of special education personnel to help them overcome their discomfort and support their efforts in teaching students to generalize and maintain newly acquired behaviors (Deno, 1978; Hoeltke & Toker, 1977; Huntze & Werner, 1982; Kerr & Nelson, 1983; Levin & Dowda, 1980; Masat et al., 1980; Oaks, 1979; Peterson, Smith, White, & Zabel, 1980b; White, 1979, 1980).

The second principle upon which the reintegration plan is built is the need for support from administrators, regular classroom teachers, and parents in the reintegration effort (Heilman, 1982; Huntze & Werner, 1982; Kerr & Nelson, 1983; Oaks, 1979; White, 1979). Professionals need to believe that reintegration is the appropriate goal of programming for behavior disordered children (Deno, 1978; Huntze & Werner, 1982; Peterson, Smith, White, & Zabel, 1980a; White, 1980). The regular education environment must be perceived as the "natural" environment for all children (Deno, 1978; McCauley, 1984; Smith, 1978; Smith et al., 1979; White, 1979).

Involving parents in making programming decisions should help produce their support for reintegration (Hoeltke & Toker, 1977; Oaks, 1979; Wang, 1981). By involving the parents in real decision making responsibilities, support for the process will be more likely to ensue.

Reintegration is a slow process. To the extent possible, all facets of returning children to regular classroom environments should be anticipated and plans made carefully (Heilman, 1982; Huntze & Werner, 1982; Masat et al., 1980). Elimination of surprises and disappointments must be a key concern, as disappointments felt by the returning student or receiving teacher can be devastating to any future reintegration efforts (White, 1980). Each reintegration placement must be planned in order to have a strong chance of success. In other words, reintegration efforts should apply the principle of "set up for success" (Heilman, 1982).

The plan described in this chapter outlines twelve components of a model reintegration plan which emphasizes the levels system.

A SUCCESSFUL REINTEGRATION PLAN

Components

In the opinion of the authors, twelve basic components should be included in a comprehensive reintegration plan in order for the plan to be successful in achieving the primary goal of reintegration for behaviorally disordered students. The twelve components are listed briefly below, followed by a more in-depth discussion of each component.

1. Comprehensive, preplacement assessment of academic, behavioral, and social skills of referred students.
2. Continuing parental involvement and communication.
3. Reintegration goals set at the initial staffing.
4. A criterion-based levels system.
5. A comprehensive behavioral monitoring system.
6. Continual assessment of regular classroom environments and students' needs and abilities.
7. Identification and implementation of academic and behavioral modifications within regular classrooms.
8. Generalization training provided within the special class.
9. A criterion-based system for continuation of mainstreaming.
10. A criterion-based system for increasing reintegration.
11. A change of placement staffing.
12. Home-school monitoring.

Discussion

Comprehensive, Preplacement Assessment

Comprehensive assessment of a student's academic abilities, behavioral skills, and social skills is necessary to initially identify the behaviorally disordered student. The evaluation should provide the staffing team with pertinent and useful information to identify the specific behaviors which impede the student's success within the mainstream. Such an assessment should be obtained through the use of diagnostic instruments which easily translate into prescriptive goals and objectives (see Wood, Smith, & Grimes, 1985, for a listing of such instruments). The process of reintegration actually starts with the selection of assessment instruments to be administered and interpreted for diagnostic and prescriptive purposes.

Parental Involvement and Communication

Parental or guardian involvement in all educational decisions relating to special educational services is a "legal" given. Parental support is essential to the reintegration process and is enhanced by continuing home-school communication. The rapport built between teacher and parent (and school and parent) by positive and constructive implementation of the mandate of P.L. 94-142 will do more than merely meet the goal of providing information to parents. This rapport will also allow the teacher and other school or support stafff to offer suggestions about changes in the home or community environment which are potentially beneficial to the student and to the home (White, 1979).

Reintegration Goals Set at Initial Staffing

P.L. 94-142 mandates the development of an individual education plan (IEP) for each child receiving special education services. The primary elements of an IEP are (a) current level of functioning, (b) long-term goals and their short-term objectives to be attained, (c) amount of time to maintain integration within the regular class setting, and (d) the inclusion of educational professionals and parents (and in many cases, the student) in the creation of this plan. These elements and the method of decision making prescribed by law basically define the IEP as a working plan (or a treatment tool) to be altered as student functioning changes.

The IEP as a treatment tool must be a "living" document; that is, it must specifically define the actual, on-going treatment plan that anticipates change in the child. The goal of change is for the child to be successful in mainstream environments. In order to be successful, those services (the treatment) must remediate the specific behaviors which had previously impeded success and which were identified during the comprehensive assessment. While the current level of functioning includes both the strengths and weaknesses of a child, it is the weaknesses (areas of student need that impede success in the mainstream) that must be reflected in the goals and objectives to be achieved within the special education program. All IEP goals are, in a sense, reintegration goals. As the child's behavior progresses toward meeting the IEP goals, reintegration becomes a reality.

Conceptualizing and formulating the initial goals of an individual child's IEP is the most important process (component) of the reintegration plan. Many factors need to be addressed in order to develop realistic and attainable goals. The bases for the goals are: (1) the behaviors needing remediation, (2) where the child is currently functioning, and (3) where the child is expected to be functioning following treatment. The end result should be behaviors which promote success within the regular education environment. To get to the end result, though, the steps must be broken down to address not only ability level, but the child's self-perceptions, motivations, and school and home environmental factors which might influence progress. All the variables affecting a child need to be reflected in the goals to increase the likelihood of the child returning to the mainstream.

A Levels System

The special class program must incorporate a flexible management system that guides the student from a self-contained special education class to a simulated regular education class (Huntze & Werner, 1982; McCauley, 1984). Such a system provides different levels of monitoring, feedback, and reinforcement of a student's behavior as the child progresses from one in-class structure to the next. Children removed from the mainstream to receive special education programming initially require much supervision and structure, such as that found in the self-contained special education class. As the child achieves the behavioral, social, and academic goals stated in the IEP, the child is moved through different levels of structure until the level of structure most closely resembling the regular classroom environment is reached (Kerr & Nelson, 1983). In order for the student to function successfully at this normative level, behaviors

learned at lower levels must be generalized and maintained. Therefore, instruction at each level within the system is designed to teach generalization and maintenance of behaviors through instruction, feedback, and reinforcement. Such instruction, or treatment, must take place for reintegration to be achieved.

The levels concept is the "concrete" foundation of the reintegration plan's treatment philosophy. Because the levels system is the foundation on which a successful reintegration effort rests (Kerr & Nelson, 1983), it will be expanded fully in a later section of this chapter.

A Comprehensive Monitoring System

The special education teacher needs to have a planned system of monitoring behavior and providing feedback as a student progresses through the treatment levels. Since each level has different expectations of student behavior, the method of monitoring that behavior will be different in form and timing. There are two basic forms: written and verbal. The timing of monitoring and providing feedback of behavior ranges from minutes to hours to half-day to daily to weekly to semi-weekly. Even after a child is staffed out of special education, monitoring and feedback of the child's behavior will continue. At this point, however, the timing may range from monthly to semi-yearly, or even yearly.

The monitoring system includes written instruments, verbal feedback from other staff members having contact with the student, recording and/or charting of the summative information describing the behavior, and conferences. This feedback provides information relative to behavioral progress toward the IEP goals and objectives and is disseminated to all individuals involved in the student's program. The type of information recorded and/or charted (percentages, number of points) should clearly address criteria for attainment of goals.

The systems for monitoring and feedback should be a continuum reflecting the levels system used within the specific special education setting. At the time of special education placement, the monitoring system will be in written form describing behavior demonstrated within the special class setting with frequent, regularly scheduled feedback to the student throughout the day. The written form enhances the child's ability to "see" behavior and progress. This is also true of the recording/charting which is part of the feedback conference. The primary function of charting, however, is long-term. That is, it presents a picture of behavior which is needed to make objective (data-based) decisions (Heilman, 1982; Levin & Dowda, 1980).

As the student progresses through the levels, the timing aspect of the written form and feedback conferences, the type of written form required by the mainstreamed classes, and the goals being evaluated must change to meet the current needs of treatment for the individual child. Verbal feedback from regular class teachers begins to be used in conjunction with written feedback. Eventually, as the student approaches full-time mainstream, verbal feedback becomes the primary monitoring system. Such feedback continues not only until the staffing team makes the decision to staff a child out of special education, but thereafter, to maintain reintegration.

The monitoring and feedback system of a special education program plays a major part in defining reinforcement within that program for an individual child. The level at which a student is currently functioning may define the "when," "what," and "where" of reinforcement; but the monitoring system defines the "how" and "why" of reinforcement. The "how" refers to how the data is translated (i.e., into points, percentages). The reinforcement indicator for a particular child is defined on the basis of how the data is translated. The "why" refers to whether or not the student has met the criteria necessary for reinforcement. By conferencing and recording/charting with the child, the special class teacher and the student can objectively decide if reinforcement has been earned. In fact, this feedback itself may be reinforcement, as praise and recognition are part of the conference. For the higher level student ready for full-time regular class placement, the feedback conference with attached social praise statements and constructive criticism may be the sole reinforcement. While there may be social contingencies being earned, such as those found in regular classes, the child is now at a level when reinforcement is much more internal. In other words, satisfaction is achieved by knowing that successful mainstream behavior is being maintained or that still-needed improvements are being made.

Assessment of Regular Classroom Environments

When a child has progressed to the level where integration into a regular education class seems appropriate, it is imperative to find a class in which the student has a good chance for success. Readiness for reintegration means engineering the mainstream environment so that the progress being made can continue. If the child is placed in a class that does not provide a good match between the student and

the class variables, then failure may once again be experienced. This is especially damaging if the failure occurs in the very first mainstream class. The reintegration effort for an individual child could be set back if the child does not feel comfortable and successful in that first classroom.

The decision where to begin reintegration must be as objectively based as the decision when to begin reintegration. When to begin is dictated by the levels system. The levels system includes four levels: Level 1: "Self-Contained Instruction," Level 2: "Readiness Instruction," Level 3: "Generalization Instruction," and Level 4: "Maintenance Instruction" (see the subsection entitled "The Levels System" for further explanation). When the child has earned Level 2 (Readiness Instruction), the special class teacher must begin an assessment process to determine a "close match" between the child and a mainstream class environment. A "close match" refers to a class which has the capability of meeting a child's academic, behavioral, and social needs and abilities (White, 1980). The following classroom factors in terms of their effect on the student should be considered: teacher personality, teacher instructional style, academic expectations including materials available, behavior management system, and peers. This assessment of the regular classroom environment will provide objective information to assist in making the decision of where to begin reintegration when the child earns Level 3 (Generalization Instruction). The child must be "set up for success" on this journey back to the mainstream.

Classroom/learning environment assessment tools are used in one of two ways: the student completes an inventory providing learner perceptions; or a classroom observer completes a checklist providing a systematic recording of classroom behaviors. An informal observation utilizing an anecdotal record can provide an account of student behavior, setting expectations, and environmental factors giving an interactional summary of the classroom.

The assessment of the classroom environment prior to reintegration, in combination with the on-going evaluation of the child's progress toward meeting behavioral goals, provides information to determine if a good match is a realistic expectation. This matchmaking task requires some predictions, given that the child in question is not currently in the environment being observed and evaluated. At the transitional and high school levels, such predictions are more important considering that the child may not be returning to the same preplacement classes. Although not as objective as the other components of the reintegration plan, the good match concept has a better chance of being created with an objective assessment of the student and the possible classroom environments. This component of the plan has to be in place for reintegration to have a respectable chance of working.

Academic and Behavioral Modifications Within Regular Classrooms

Once the regular classroom environment has been assessed and determined to be a close match possibility for integration, the special and regular class teachers need to meet and discuss the student's abilities and needs in relation to that environment. If the match seems appropriate, then perhaps no changes will need to be made. However, the reality is that most matches will be "close," not perfect. This means that some modifications will need to be made in order for the child to have a fair chance within the regular class (Wang, 1981; Warger, Aldinger, & Okun, 1983; White, 1980). This would be particularly true in schools with limited classroom choices.

These modifications will be of a "reasonable" nature, meaning that the changes do not require excessive effort or excessive training from teachers. There must be compromise in the accommodation — some modifications made by the teacher in the class structure and others made by the student in expected behaviors. Since the child has attained the level of programming in which reintegration is initiated, it can be assumed that the student has undergone many changes already. However, there may still be some behaviors which can be altered by the student to make the student-class match work more smoothly. Such modifications made by the student will be discussed in the subsection entitled "Generalization Training Within the Special Class."

In order to make a closer match, the teacher may need to make modifications in the class structure. The class structure, in this context, refers to the academic, behavioral, social, and physical components of a class in terms of how they interface with each other. Class structure is an all-inclusive term for all behaviors and expectations occurring within a classroom. Teachers in primary charge of the education of the reintegrated student need to make predictive judgments concerning how the specific child will interact with the factors present in the classroom. If the prediction is that there are certain factors which may interfere with the success of the integration due to some mismatching, and that reasonable changes can be made to correct the mismatches, then the teachers have a professional responsibility to plan such changes (White, 1979).

Modifications made by teachers within the class structure may take any one of several forms or combinations of those forms. These may be changes in academic materials, methods of presentation, methods of evaluation, or some other learning-related factor. They may be alterations in the behavior management system used within the classroom including behavioral expectations or methods of behavioral correction and consequation. Changes relating to the social environment including social skills expectations and instruction, and peer interactions being reinforced by the environment itself may need to be made. Such social behaviors may be reinforced by the characteristics of the physical environment. Perhaps making some alterations in the physical setting, which might concurrently effect methods of instruction, would provide for some of the social changes which must occur for the reintegrated student to have a better chance of experiencing success. Physical modifications in the environment could feasibly affect academic, social, or even behavioral needs. There are innumerable modifications that could be made within any class structure for improved instruction to occur. If the changes necessary are of a reasonable nature (the teacher and the class are capable of making the alterations), then they should be attempted.

As stated earlier in this section, ideas for possible modifications are generated by the special and regular teachers through meeting(s) following the assessment of the regular classroom environment. Members of the building special education team may be asked to join the discussion of possible class structure alterations needed to make a better match between a specific student and that class. This might be particularly useful if disagreements arise that require a mediator to assist in finding a solution. Other reasons for including professionals from the special education team might be to brainstorm further ideas, or to share responsibilities if the interventions suggested require certain expertise or more personnel to make them operational. Whatever the interventions, and whomever the people involved in their development, the academic and behavioral modifications made within the regular class may be the deciding factor in whether or not a specific mainstream class is a successful placement for a behaviorally disordered student.

Generalization Training Within the Special Class

The modified instruction which takes place within the special class environment in an effort to make a closer match between the student and the regular class will be referred to as generalization training. Generalization is the ability of a student to apply what has been learned in a treatment environment to new environments such as a regular education class. While the initial effort at reintegration requires a certain amount of generalization training, later stages require substantially increased emphasis on training for generalization as the student progresses toward full integration into the mainstream. An in-depth discussion of generalization and maintenance can be found in the following chapter.

The academic and/or behavioral instruction or modifications applied within the special class prior to actual integration are designed for the purpose of improving a student's generalization skills specific to the identified mainstream class environment. Such instruction and expectations may include study habits, homework, social skills, study skills (i.e. organization, test taking), and communication or other skills. The goals to be attained in these areas were derived from the assessment of the regular classroom environment and how the factors present in the classroom are predicted to interact with the student's current level of functioning. If the placement planning team, including parents and the responsible teachers, believe that it is the child who must make additional changes prior to the integration taking place, then the goals for student behavior change to be attained are written and become part of the student's IEP. The teacher in the special education class then plans to simulate the structure and activities of the regular class so that generalization of learned behavior has a better chance to occur. As the criteria for mastering the new goals are met, the student becomes ready for actual integration into the regular class.

A System for Continuation of Mainstreaming

The importance of objectivity in decision making has been stressed as data-based decisions must be made within each component of the reintegration plan. The decisions regarding continuation of a specific child in mainstream classes are not exempt from objectivity and analysis of data (feedback) (Levin & Dowda, 1980).

The behavioral monitoring system is used in making decisions regarding the continuation of mainstreaming. Written and/or verbal feedback describing a mainstream student's behavior is provided to the special class teacher daily during initial reintegration and at least weekly during increased mainstreaming. This data is charted and discussed with the student on a regular basis (i.e., daily, weekly). The feedback is translated into points or percentages and averaged weekly. It is this weekly average

which is utilized in making continuation decisions. Using a weekly rather than a daily average takes into account the good and bad days everyone experiences in life. It would be impractical and grossly unfair to remove a student from a mainstream class because of occasional "bad" days. It is also impractical to remove a student from a mainstream class because of isolated "bad" weeks. Such removal would not take into account the "adaptation effect" (White, 1980).

The adaptation effect emphasizes that a student must be given a sufficient amount of time to adapt to a different, less structured, and more highly demanding environment. The reintegrated student often experiences a certain level of anxiety caused by past failures within the regular class setting (Masat et al., 1980). Not even the best simulated regular class within a special class can duplicate the realities of a regular class environment. However, without such simulation, reintegration might never be achieved for some highly anxious, low self-concept children.

The criterion-based system for continuation of mainstreaming allows for marginal difficulties that might be experienced within the regular education environment. Successful mainstreaming is defined by a pre-established criterion derived from translating behavioral feedback into a numerical mode. The feedback is analyzed, charted, and averaged weekly. If the student has attained the established criterion (weekly average), then the mainstream class is continued. If the student does not attain the needed weekly average and is experiencing marginal difficulties, then the student is given two additional weeks to reach criterion. During these two weeks, alternative interventions are explored utilizing different methods or personnel in an attempt to "save" the mainstream class. For example, behavioral contracting might be implemented in order to gain more commitment or responsibility from the student, or to clarify roles and behaviors expected within the classroom. The special class teacher may feel that other personnel should be taking part in the alternative interventions due to the expertise needed to implement the intervention or time required. In this case, the special education consultant, social worker, psychologist, or some other professional might be asked to assist with the interventions.

Following the two week period of alternative interventions, the student will have either reached the necessary criterion or difficulties will be continuing. If the criterion is reached, then mainstreaming within that specific class is continued. If the student is unable to reach criterion, the student is removed from the mainstream class and reinstated in the special class. This manipulating of a child's mainstream environment should occur only if marginal difficulties are being experienced. If the student is experiencing major problems in the attempt at reintegration, then the teachers, other professionals, parents, and possibly the child must make an important decision regarding continuation of mainstreaming. It might be of greater service to the child to terminate the reintegration effort immediately and reevaluate the child's special education program to determine what changes need to be implemented to make the child's treatment more productive.

Through the use of an effective behavioral monitoring system, the decisions affecting continuation of a mainstream placement are objectively based on behavioral progress data. Without this data-based component, the reintegration process would be haphazard at best.

A System for Increasing Reintegration

This component of the reintegration plan is an extension of the preceding component. As the child consistently demonstrates appropriate and productive behavior within the initial mainstream class, a decision regarding further reintegration needs to be made. Again, the decision is objectively based on data (Levin & Dowda, 1980). The system for increasing reintegration requires the same weekly average criterion being attained as the system for continuation of a mainstream class. The difference between the two systems is that in order to increase reintegration the student must have attained the criterion for at least three consecutive weeks. Therefore, the decision to increase reintegration is not made on a weekly basis, but made after three consecutive successful weeks. Additionally, a child can lose a mainstream class after three consecutive unsuccessful weeks. Gaining a new mainstream class or losing an unsuccessful one requires the same evaluative time period.

Another conceptual difference between this system and the previous one discussed is that continuation in a mainstream class is based principally on the concept of generalization (transferring treatment behavior to non-treatment settings). Increasing reintegration can be viewed as being based on the concept of maintenance of behavior (maintaining treatment behavior in non-treatment settings over time) (White, 1980). In the model reintegration plan presented in this chapter, the ability to generalize behaviors is emphasized as the child earns and succeeds in the first two mainstream classes. The ability to maintain such behaviors is emphasized as the child increases reintegration to the third and subsequent mainstream

environments.

Since maintenance of behavior does not occur any more naturally than does generalization of behavior, a treatment process must be added to the reintegration plan of behaviorally disordered students. However, as stated earlier, this component is seen as an extension of the continuation component because they work hand-in-hand. In other words, the two work in a cyclical process. The child earns an initial mainstream class. Success is achieved over a three-consecutive-week period. Reintegration is then increased. The new mainstream class, in addition to the initial mainstream class, must meet continuation criterion on a weekly basis or be placed on the three week cycle to "save" the class(es). Success in both classes is maintained for a three-consecutive-week period. Reintegration is again increased (White, 1980).

Other components of the reintegration plan are initiated when a student has attained criterion for three consecutive weeks. The next regular class into which a child will be integrated needs to be chosen by once again assessing potential regular class environments. Choosing this second class, or any additional class, is no less important for the continual progress of the child than choosing the first class. Anxiety and adaptation concerns may be slightly lessened, but are still present.

In evaluating additional regular class environments to find a second close match between child and teacher/class, it may well be that academic, behavioral, social, or physical modifications in that class will have to be made. It may be that further or modified instruction will need to be accomplished within the special class. If such instruction needs to take place within the special class setting, then additional goals must be written for the child, and these goals must be mastered prior to the actual integration. This will require additional time following the decision to increase reintegration. During this time, the student must continue to attain criterion in the mainstream class(es). Increasing reintegration adds to the comprehensiveness of this model plan which attempts to have all aspects of a child's educational program come together for the good of the child.

A Change of Placement Staffing

Eventually, as the cyclical process of continuing and earning classes evolves, a student will have achieved full-time regular class membership. For a period of time following full-time reintegration, monitoring and feedback continue. (A sample form for such monitoring is included in the Appendix to this chapter.) Generalization and maintenance of behaviors are the focal points of this monitoring. The student returns to the special class only for receiving feedback on progress and for problems or concerns as needed (Heilman, 1982). For the most part, the student is considered a regular class student with regular class expectations and responsibilities. The time period needed for this phase is at least one quarter of the school year.

Following this phase of monitored, successful, regular class placement, a staffing is held to make future programming decisions relating to the child's educational placement. In most cases, the child who has attained full-time regular class status, had probably already been staffed into a less restrictive special education program. Therefore, the child might be staffed into a resource program for continued support and monitoring or staffed out of special education services totally.

A change of placement staffing is not restricted to one time in the program of a behaviorally disordered student. A child who has reached total reintegration has probably had his educational program reviewed in staffings several times. Reintegration must be conceptualized in each level of special education programming, from the most restrictive to the least restrictive [Deno's (1978) cascade of services]. This means that students will be staffed into less restrictive special education programs as progress toward successful reintegration is realized. For example, a child might begin special education programming within a self-contained, severe class. As progress is made toward improving those behaviors which had impeded success within the mainstream, a change of placement staffing would be held moving the child to a less restrictive program such as a self-contained class for less severe problems or a special class with integration.

The special education staffing brings together all those involved with the child for the purpose of determining an appropriate educational program and placement. Teachers, administrators, parents, the child (if appropriate), and special education support personnel are included. Staffings are held any time decisions need to be made concerning change of placement or program. The two primary staffing components of the reintegration plan are the initial staffing and the change of placement staffing. These "meetings of the minds" are of equal importance within the process. While the initial staffing initiates the reintegration process, the change of placement staffing continues the process from a different setting, redirects it, or terminates it.

Monitoring Progress in the Home School

Many children who are staffed into special education programs for behaviorally disordered students are removed from their home school and placed in other schools within the school district or in neighboring school districts. There are two primary reasons for this. One, the student may have a bad reputation within the home school and may have an uphill battle toward reintegration. Two, the most appropriate program is located in another school or district. In many cases, the decision is based on both reasons.

Regardless of why the student was placed in a school other than the home school, the time will arrive following the termination of special education services when the child will need to be returned to the home school (White, 1980). The staffing team takes on new responsibilities when this decision is made. The home school must be prepared for the student's return. The teachers and administrators who will be responsible for the student's educational program will have to be "sold" on the fact that the child has achieved levels of behavioral, social, and academic skills which will result in success within the regular classroom (with the possibility of minor modifications to accommodate needs and abilities). Data from the recording and charting of behavioral progress throughout special education programming are used to demonstrate the child's progress.

Once the regular educational program meeting the needs of the child has been developed within the home school, it is highly recommended that a final component of the reintegration plan be put into effect. This component is the continuation of behavioral monitoring. The special education team of the home school is in the best position to perform this function (White, 1980). The monitoring should be informal in nature because the child is no longer officially enrolled in special education services. The team's primary responsibility in this monitoring function is to make sure that the child is continuing to receive an appropriate education within the regular setting. If the child begins to experience some problems in the regular environment, team members in conjunction with the regular education teachers, must identify and plan modifications which are necessary for the child to regain success.

Without this component of a reintegration plan instituted within a child's home school, the student may return to pre-treatment behaviors. If this change goes unnoticed and untreated for an extended period of time, the student may have to be re-staffed into special education with reintegration being severely jeopardized. Since the monitoring in the home school is informal, the length of time for it to be continued is flexible. The monitoring can be terminated when the team feels the student is secure within the regular classroom environment.

This concludes the discussion of the twelve basic components of a successful reintegration plan. An in-depth look at the levels system follows.

The Levels System

The levels system is the "concrete" foundation of the reintegration plan's treatment philosophy. As the child works through the system, reintegration becomes a reality. The whole process becomes observable through charting and recording behavioral progress. The behavioral management system used within the special class is defined by the levels system. Much time and effort need to be expended on the development of the levels system because it is so vital to effective and efficient reintegration (Smith et al., 1979). An effective levels system consists of four levels. A listing of the elements included in each level follows.

Level 1: Self-Contained Instruction

Entry into special education.

- Identify the behavioral, social, and academic goals to be attained by the child.
- Provide frequent feedback and reinforcement on behavioral, social, and academic performance.
- Provide reinforcement which is tangible and continual.
- Provide a highly structured environment with few privileges.

Level 2: Readiness Instruction

- Consult with the child, parents, and staff to prepare a "mainstreaming mind set."
- Assess classroom environments to determine a "close match" for the first integration.
- Identify the behavioral, social, and academic objectives to be obtained by the child in order to initiate reintegration.
- Provide less frequent feedback and reinforcement.
- Move from tangible and continual reinforcement to more social and intermittent.
- Provide a less structured environment with more privileges. The structure begins to resemble regular

class structure. The privileges are increased to develop the child's intrinsic desire to perform the additional responsibilities inherent in the less structured, more regular environment.
— Require more independent work-study skills.

Level 3: Generalization Instruction

The child is mainstreamed into one or two additional regular education classes.
— Consult with the child, the parents, and the staff to prepare for further mainstreaming.
— Assess classroom environments to determine a close match for the second and third integrations.
— Identify the behavioral, social, and academic objectives to be attained by the child in order to continue current mainstreaming and to further reintegration.
— Provide feedback and reinforcement resembling the regular classroom environment.
— Record the feedback in terms of points or percentages which are used in making certain decisions relating to leveled privileges. However, social and natural reinforcers are stressed.
— Provide a structure which resembles the regular class environment to the degree it is feasible to do so within the special class setting. Privileges are increased beyond those identified in Level 2.
— Require independent work-study skills necessary to function successfully within the regular classroom environment.

Level 4: Maintenance Level

The child is mainstreamed into three or more additional regular education classes.
— Assess classroom environments to determine close matches for subsequent integrations.
— Identify the behavioral, social, and academic objectives to be attained by the child in order to continue current mainstreaming and to further reintegration.
— Provide feedback and reinforcement resembling the regular classroom environment.
— Continue to record feedback as points or percentages to be used in making certain decisions relating to leveled privileges. Social and natural reinforcers are stressed.
— Provide a structure which resembles the regular class environment to the degree it is feasible to do so within the special class setting. Privileges are decreased within the special education class and transferred to those naturally occurring within the regular education environment.
— Require independent work-study skills necessary to function successfully within thee regular classroom environments.

All newly-staffed children will automatically be placed in Level 1 (Self-Contained Instruction). However, it is important to realize that not all children will be placed in special education for their total instructional time. Some children may not be experiencing difficulties in certain areas of the regular environment. For example, if a child has not been experiencing problems in an art class, the staffing team may decide to continue the child in that regular class. Often, if a child is performing satisfactorily within some environments and not in others, it is because teachers in the environments have different expectations, instructional styles and program structure. Given the reintegration philosophy of special education programming, it would not be appropriate to remove the student from already successful regular class environments. The staffing team will develop special education for the child in the areas in which the student has experienced failure, and it is this programming which will begin in Level 1 of the special education class. The special class teacher will have only a monitoring responsibility for regular classes in which the student remains.

There are two basic principles which are included in all four levels. The first is an underlying assumption that media and various instructional styles and patterns reflective of a regular class will be planned and utilized within the special class to expose all the children in all the levels to simulated regular class structures (Oaks, 1979; White, 1979, 1980). It would not be feasible to physically create a simulated regular class environment for only the higher level students. Such must be part of every child's program and preparation for reintegration. Some simulations, however, may be individualized and applied for higher level students.

The second principle common to all the levels is the criterion for success. Success is defined as attaining individualized goals and objectives as evidenced by reaching a pre-established percentage or number (a success criterion) derived from monitoring and feedback. A commonly used percentage indicating success is 80 percent of the measurement indicator (points, tokens). The difference between levels regarding the success criterion is the timing of feedback. Lower levels might be receiving daily feedback regarding success; higher levels might be on a weekly or even a semi-weekly feedback schedule. The criterion (i.e., 80 percent) across all four levels relates to progress toward individual goal attainment.

To identify a more objective criterion within a particular building, the teacher might observe regular

class environments to determine levels of acceptable behavior. That information would then be applied to the measurement indicator used in the special class to define the success criterion for the levels system.

A third principle to be operationalized in the levels system is the time component necessary for movement from one level to the next. The proposed model recommends that the student demonstrate at least five consecutive weeks of successful performance toward individual goal attainment to quality for promotion from Level 1 to Level 2 and from Level 2 to Level 3. This would permit a child to be mainstreamed into the first regular education class in the beginning of the following quarter. The beginning of each quarter is typically an advantageous time to join a class as new instructional units are generally introduced at these times. This may ease integration anxieties. The timing of integration to fit curriculum demands is important throughout the process, but essential for the first mainstream class.

The time component is different moving from Level 3 to Level 4. The child remains in Level 3 until success has been demonstrated in two additional regular education classes. This would mean that generalization of treatment behaviors had been achieved in at least two mainstream environments. Since the time factor recommended to add new mainstream classes is three consecutive successful weeks, movement from Level 3 (Generalization) to Level 4 (Maintenance) would require at least six weeks. This may not coincide with the regularly planned curriculum transitions. Therefore, the teachers involved in the integration would have to plan the actual starting date of the integration for a later time to provide for "close match" (with regard to class/student curriculum placement).

A Final Comment

The reintegration plan presented in this chapter is a model plan. The model may not be able to be replicated in all school settings, but approximations of it can be achieved. Each special class teacher should use those components which are feasible given particular circumstances and adapt them as needed.

The specific components, criteria, and types of environments within which specific students will be integrated, among other factors, may differ from those suggested in presenting the model. Reasons for adaptations are evident. It is not realistic to expect all parents (guardians) to be involved or supportive. It is not realistic to assume that all school facilities have unlimited class environments or teachers from which to choose to create "close matches" for each student. It is not realistic to assume that all students will attain full reintegration or even desire to attain such.

Many students will need to be provided an entirely different direction such as vocational options rather than academic ones. The reintegration plan presented can be used in vocational environments as well as academic ones. The different environments would mean different curriculum requirements, and possibly, different behavioral expectations. Therefore, special class treatment would vary from that given an academically oriented student.

While less than optimal conditions will require alteration of the plan, the concepts presented are important ones which should be present to some degree in special education programming for behavior disordered children. The professional educator should strive for parental involvement. The educator should emphasize "close match" programming even where there is only one teacher available to teach a child. In order for behavioral gains to be realized, changes must be made both by the student and by those people interacting with the student. Each individual involved needs to be willing to make as much change as possible in order to facilitate the student's progress.

THE CASE STUDY

A review of the list of the twelve components of the model reintegration plan will assist the reader in identifying those components present within the case study that follows.

Tom is an 11-year-old male initially referred for evaluation from his local elementary school. He was in his fifth grade year. Referral behaviors included a low frustration level demonstrated through task avoidance and refusal to complete work, difficulty following directions on assignments, and rushing through assignments resulting in multiple errors or turning in incomplete assignments.

Teachers described Tom as an intelligent young man who had consistently performed below grade level since entering kindergarten. His frustration seemed to develop when his efforts did not meet his own high personal standards. Reading skill development was delayed in comparison to his peer group. Most teachers felt that Tom was also immature for his age.

Efforts to aid Tom's success included conferences with his parents, individual help (primarily in reading)

from his teachers and a community volunteer, revised spelling lists, one-to-one instruction after school, movement of Tom's desk closer to the teacher's desk, and assuring that Tom understood directions through writing them on the board and having him read them aloud to the class. These interventions were consistently implemented for one semester but Tom's behavior did not improve. At that point, the educational services team requested parental consent to complete a comprehensive evaluation.

The diagnostic assessment occurred over a nine-week period and rendered the following information. On the Weschler Intelligence Scale for Children-Revised, Tom earned a verbal score of 100 and a performance score of 84. Resulting full scale score was 91. All verbal subtest scores were in the average range with the exception of Similarities. Tom earned below average scores on three of the performance subtests: Picture Completion, Picture Arrangement, and Block Design. The evaluator noted visual-motor difficulties which resulted in poor fine motor skills.

Two diagnostic academic instruments were administered: the Key Math Diagnostic Arithmetic Test and the Woodcock Reading Mastery Test. Grade level achievement on the Key Math was scored at 5.1 which was commensurate with his grade placement. Fractions were slightly below grade average. Composite score on the Woodcock Reading was 3.8 with Word Recognition and Word Attack subscores significantly below expected standards.

Tom's basic skills teachers were interviewed using Behavior Evaluation Scales (BES) to obtain measures of his behavior. Teachers' responses resulted in average scaled scores on items relating to Tom's general mood and affect, as well as interpersonal relationships with peers and adults. However, responses suggested that teachers perceived Tom as having a tendency to develop physical symptoms associated with personal or school problems. They reported that Tom occasionally complains of physical discomfort (i.e., headaches/ stomach aches) when tasks are assigned. Therefore, below average scores were obtained on the subtest measuring physical symptoms/fears. Significantly low scores were obtained on items related to learning. These could not be contributed to intellectual, sensory, or health factors.

Tom's teachers reported that he has difficulty with organizational skills and often fails to come to class prepared. They reported that he is reluctant to begin tasks and has trouble following either verbal or written directions. They see him as either refusing to do an assignment, or handing it in after doing it unacceptably.

A social history was obtained. It was found that Tom's parents were quite concerned about his progress. His parents were divorced, and although he lived with his mother, he had weekly contact with his father. It appeared that his parents had different expectations and methods of discipline, which appeared a possible factor in Tom's reported school problems. Tom was adopted as an infant and the only other child in the family is a natural son who began attending a secondary boarding school that fall. Tom's father is a professional man who traveled on occasion. His mother had worked since Tom was eight. Tom's mother left for work before Tom got up and then called him every morning so he had time to get to school. He usually went to bed at 9:00 p.m. Tom went to stay with a sitter after school.

Tom's last physical occurred during the preceding summer. His general health was fine. Both hearing and vision were within the normal range.

The team summary statement indicated that his current functioning was within the average range of intelligence. Academic functioning was reportedly impaired due to motivational difficulties. In classrooms, Tom was able to participate in group activities, but took excessive time getting started on independent seat work. Behavior at this point was not disruptive.

It was recommended that Tom be served by the multicategorical resource program as a student with a behavioral disorder. The primary emphasis of his program was to coordinate task completion expectations between the parents and school with reinforcers designed to increase the number of homework assignments completed and the amount of time spent studying for tests. Tom's parents were encouraged to seek counseling for him and/or the family if behavioral difficulties continued or escalated. One-on-one phonetic reading instruction was provided to increase reading skills.

Upon entering the resource room, Tom was removed from his alternating music and art classes but remained in P.E. and all academic classes. IEP goals were identified reflecting Tom's behavioral and educational needs and abilities.

Minimal progress was observed toward achievement of his behavioral goals, but Tom received passing grades in all subjects. Reading skills improved as he attained an overall score of 4.5 on the Woodcock Reading Mastery Test. Teachers reported that Tom performed best in one-on-one or small group settings.

Tom began displaying more serious adjustment problems during his sixth grade year when attending a transitional school which required student rotation among seven different classroom settings. Behaviors

cited were an inability to organize himself or work and inappropriate response to frustration if overwhelmed by assignments or directions. He would wad up paper, make unacceptable comments, and sometimes become tearful and refuse to give a verbal response when approached by staff. Efforts to improve positive school experiences involved increasing Tom's resource time to two hours daily, assignment of tasks one at a time, daily monitoring by the school counselor, and counseling with the school counselor as needed. Again, limited progress was noted, but Tom passed all core classes and entered the seventh grade. Tom's parents had become concerned with his increased acting out at home as well as his inability to achieve in school and sought further evaluation through two outside agencies. Involvement in an ongoing counseling program, however, was never initiated.

Tom's pattern of noncompliant behavior continued into his seventh grade year. In December of that year, Tom began refusing to attend school. His mother stated that he disliked school because it was boring. Tom was currently failing all academic classes and had become more defiant and isolated at home. His mother again requested help from the school, and the educational services team began an update evaluation on Tom to determine the appropriateness of his current placement.

Teacher reports indicated a pattern of refusing to complete work and increased withdrawal behavior. Some suspected that Tom was depressed. It was apparent that he had no peer support group and was unable to relate to adults. Tom's mother reported that he frequently slept all day, appeared morose, and demonstrated an increased frequency of destructive behavior at home.

Results of the assessment suggested that Tom's negative behavior was increasing. It appeared he was establishing a pattern of school avoidance and open defiance. It was decided that Tom might best be served in a more highly structured setting offered within a self-contained environment where the teacher/pupil ratio was 1:10 with an instructional aid provided. Since he was performing well in P.E. and art, and maintained marginal behavior in industrial technology, it was decided that he remain in these regular classes which totaled two hours each day. Tom's parents agreed with this recommendation and signed permission for placement. IEP statements written during the staffing included behavioral goals as well as a projected plan for reintegration.

Since no self-contained program was located at his home school, Tom was assigned to the nearest transitional school offering that option and enrolled prior to the start of the second semester. Upon entrance he was placed on Level 1 (Self-Contained Instruction) of the class management system which provided regular feedback on those specific behaviors previously identified for remediation. He qualified for no regular classes except those stated at the staffing. The main thrust of the program centered on establishing objectives designed to remediate the identified behaviors. His program was highly structured and he received continual feedback regarding his behavior. Reinforcers were tangible and established for both home and school. His parents were informed of Tom's school performance through daily written reports.

Tom's behavior immediately following placement demonstrated great improvement but soon deteriorated to its previous state. Attendance was erratic, and overall behavior was defiant and perceived as manipulative. In-class assignments were of poor quality and homework seldom completed. If confronted or encouraged, he became either sullen or defiant. On occasion, he walked out of class.

The behavior monitoring system showed inconsistent behavioral and academic performances with an average in both areas of approximately 40 percent compliance. Resulting grades were "Ds" and "Fs" in all areas. End of the year testing indicated no significant gains in either reading or math. School staff recommended that Tom be retained in the seventh grade. His parents concurred, and plans for the coming year were established. IEP goals remained the same, but alternative reinforcers were identified.

A meeting with Tom and his parents was held prior to the beginning of the next school year to re-establish goals. Tom's involvement was encouraged and he was asked to make a personal commitment toward reintegration. The levels system was again explained. A goal was set for Tom earn Level 2 (Readiness Instruction) by the sixth week of the quarter as reflected by the daily charting and weekly averaging of his behaviors. The results of this charting demonstrated a steady improvement in his overall compliance. He qualified for Level 2 by the pre-established date.

Another parent conference was held to begin the assessment process in determining a "close match" class for initial reintegration. Factors to be considered were Tom's skill performance levels, attitude toward work completion, need for organizational aids and consistent structure, and personal involvement. A match class was subsequently identified as Tom had higher level math skills and because the teacher was willing to provide individual instruction time for each student as well as continue the monitoring system. She would also implement academic modifications if warranted. Her expectations were clearly stated, however, as she required that Tom demonstrate at least 90 percent attendance and follow established classroom

rules and procedures.

The agreement was made and specific modifications identified. Among them were provision of a list of class rules and procedures regarding in-class assignments and homework, a mimeographed calendar of upcoming assignments, a posting of daily assignments on the board with time allotted for copying and individual time to state specific directions, provision of a written notation listing incomplete assignments on the weekly monitoring sheet, and identification of a time for individual study after school. Tom achieved Level 3 (Generalization Instruction) as he entered this class during the second quarter of the year.

Tom met all behavioral and social expectations of the class, but continued having difficulty completing in-class assignments and homework. Teacher reports indicated observed frustration resulting in frequent off-task behavior. Agreement was made to continue the completion of assignments as directed with time allotted within the special class setting to finish incomplete work if on-task behavior improved in his regular class. One period of the day was established as a study time. It was requested that his parents designate a specific time in the evening for homework and that they reinforce work turned in on time. Both strategies increased Tom's work production and subsequently raised his grade.

Since Tom's daily charting demonstrated an increased level of achievement in this class, the special education teacher began assessing other potential reintegration classroom environments. After five weeks of successful performance in the match class, Tom was enrolled in a reading class. This decision was made because it offered individual as well as small group instruction on his functioning level. Materials were selected to supplement the regular test and workbook for use with the special education room. Behavioral expectations and similar modifications as those provided in the math class were identified. The one period daily study time remained, but now Tom would need to complete both math and reading assignments during that time. Charting was carefully monitored to determine progress in both academic mainstreamed classes. The process of selecting another mainstreamed class began.

Tom maintained high performance standards in both academic mainstreamed classes with an average daily charting level of 89 percent for all identified behaviors. Work completion and accuracy on assignments remained the lowest areas, averaging 82 percent. Tom's social skills also improved as he was frequently observed interacting with students in the hallways and at lunch. His overall attitude toward school seemed to improve. He appeared eager to acquire more regular classes and earn a promotion to Level 4 (Maintenance Instruction).

Tom met the criterion for promotion into Level 4 at the beginning of the third quarter. However, it was decided to make the class selection at that time, but not enter the class until the beginning of the next school year. A social studies class was chosen even though Tom's reading skills remained at approximately the fifth grade level. The regular classroom teacher had agreed to accommodate for his skill deficits by providing the same organizational aids stated for math as well as using additional strategies. These included alteration of assignment lengths (completing only a portion of the text and answering every other question), allowing extended time to complete assignments, providing a recorded tape of the class text, identifying some small group projects, and establishing time for peer tutoring. Tom ended his seventh grade year with successful completion of all subjects and was prepared for further reintegration at the start of his eighth grade year.

Tom began level 4 programming that year mainstreamed into six regular classes including P.E., art, music, industrial technology, reading, and social studies. The goal was to move toward a change of placement staffing with a projected date being the end of the first quarter. Successful reintegration was to be measured by continual data analysis resulting from the weekly feedback system.

Tom appeared highly motivated and began the year with great effort. As progress continued, however, Tom's anxiety level rose and he began experiencing difficulties, primarily in his social studies class. The weekly feedback sheets indicated that he was off task more frequently and completed less work, thereby endangering continuation in that class. At that point, a meeting was held with Tom, the special education teacher, the regular education teacher, and his parents. Concerns were discussed, and it was decided that Tom continue in that class with the expectation that he demonstrate acceptance of the pre-stated responsibilities. A behavioral contract was written to delineate those responsibilities and reinforce Tom's commitment toward full reintegration. He had two weeks to meet the agreed upon criterion. During this period, it was decided that daily reports would be sent home to aid homework supervision. The contract and subsequent daily monitoring helped Tom meet class expectations. He remained in the class, and a change of placement staffing date was set.

Since Tom had left his home school to attend the self-contained class, and because a change of placement to a less restrictive program was possible, representatives from the home school attended the staffing.

The purpose of the meeting was to review Tom's progress from the point of entering special education and devise an educational plan that best suited his current needs. The progress made toward improvement of the behaviors which previously impeded his success was clearly demonstrated by the charting which resulted from the weekly feedback sheets. This data also indicated that continuation of support and monitoring would be warranted, but could be provided with less special education involvement.

The resulting recommendation was for Tom to return to his home school at the semester and receive one hour of resource assistance daily. Tom's parents agreed, and a plan was devised which established lines of communication and responsibility regarding methods of monitoring his behavior. It was determined that the weekly feedback sheet would continue for the remainder of the year. A goal was set to see Tom successfully returned to the regular program with no special support services by the end of his eighth grade year.

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APPENDIX

Mainstreaming Sheet

Name _____ Date _____

			No	Yes	
Class:	1. Prepared for class	-	0	2	Homework:
	2. Paid attention (on task)	-	0	2	
	3. Completed classwork	-	0	2	
	4. Interacted appropriately	-	0	2	
	5. Participated when asked	-	0	2	
	6. Is "current" on all work	-	0	2	Teacher Signature:
Class:	1. Prepared for class	-	0	2	Homework:
	2. Paid attention (on task)	-	0	2	
	3. Completed classwork	-	0	2	
	4. Interacted appropriately	-	0	2	
	5. Participated when asked	-	0	2	
	6. Is "current" on all work	-	0	2	Teacher Signature:
Class:	1. Prepared for class	-	0	2	Homework:
	2. Paid attention (on task)	-	0	2	
	3. Completed classwork	-	0	2	
	4. Interacted appropriately	-	0	2	
	5. Participated when asked	-	0	2	
	6. Is "current" on all work	-	0	2	Teacher Signature:
Class:	1. Prepared for class	-	0	2	Homework:
	2. Paid attention (on task)	-	0	2	
	3. Completed classwork	-	0	2	
	4. Interacted appropriately	-	0	2	
	5. Participated when asked	-	0	2	
	6. Is "current" on all work	-	0	2	Teacher Signature:
Class:	1. Prepared for class	-	0	2	Homework:
	2. Paid attention (on task)	-	0	2	
	3. Completed classwork	-	0	2	
	4. Interacted appropriately	-	0	2	
	5. Participated when asked	-	0	2	
	6. Is "current" on all work	-	0	2	Teacher Signature:
Class:	1. Prepared for class	-	0	2	Homework:
	2. Paid attention (on task)	-	0	2	
	3. Completed classwork	-	0	2	
	4. Interacted appropriately	-	0	2	
	5. Participated when asked	-	0	2	
	6. Is "current" on all work	-	0	2	Teacher Signature:
	Total Daily Points	-	____		

Comments:

Chapter 12

GENERALIZATION AND MAINTENANCE

Linda Holvik
Teacher, Behavioral Disorders
Marshalltown Community School District
Marshalltown, Iowa

Jean Benskin
Teacher, Behavioral Disorders
Marshalltown Community School District
Marshalltown, Iowa

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Chapter 12

GENERALIZATION AND MAINTENANCE

Linda Holvik
Jean Benskin

INTRODUCTION

The major goal of special education for behaviorally disordered youngsters is improvement in behaviors so the youngsters can participate more fully in the mainstream environment, both in school and in everyday life. In order to reach this goal, intensive services are provided for students identified as behaviorally disordered, and teachers implement a wide variety of interventions designed to help students change their inappropriate, maladaptive behaviors.

One of the most frustrating experiences for any special education teacher is the failure of a student's positive behaviors demonstrated within the special education setting to transfer to situations outside it. This chapter will present practical methods which teachers can use to ensure that the positive behaviors and improved academic and social skills which students can demonstrate in the special education setting will generalize to a variety of situations and will be maintained.

GENERALIZATION

Generalization is said to have taken place when behavior learned in one situation occurs in another situation. It is basic to the performance of all adaptive human behavior because, if our behavior didn't generalize, we would be limited to the point where we would have to learn entirely new sets of behaviors every time we found ourselves in a somewhat different situation (Fischer & Gochros, 1975).

The two basic types of generalization are known as stimulus generalization and response generalization. Stimulus generalization occurs when behaviors which have been reinforced in the presence of a certain stimulus occur in the presence of different but similar stimuli (Epps, Thompson, & Lane, 1985). If Jane has been taught to accept behavioral correction from the special education teacher and the associate teacher without crying, and she later accepts correction from the lunchroom supervisor without crying, stimulus generalization has occurred.

Response generalization occurs when a change in one behavior results in changes in other similar behaviors. Such similar behaviors are often referred to as a response class (Alberto & Troutman, 1982). Ollendick and Matson (1976) used overcorrection procedures to reduce hitting behaviors of two preschoolers who hit others and cried when they did not get their own way. The intervention was specifically designed to reduce the instances of hitting, but instances of crying were also reduced. Garcia, Baer, and Firestone (1971) reinforced a very young handicapped child for imitating specific motor responses, and the child soon imitated other behaviors which had not been reinforced.

MAINTENANCE

Maintenance is said to have taken place when skills and behaviors persist over time, are durable, and are resistant to extinction. The goal common to all teachers is that students maintain the academic, behavioral, and social skills they have learned. It is meaningless to change behavior unless the change can be made to last (Alberto & Troutman, 1982).

PROGRAMMING FOR GENERALIZATION AND MAINTENANCE

There is some mention of generalization and maintenance in the literature on such behavior-change strategies as extinction and overcorrection. Alberto and Troutman (1982) reviewed the literature on extinction and concluded that extinction has limited generalizability. Since the behavior may occur as frequently as ever in settings where extinction is not in effect, extinction may be required in all settings in which a behavior is inappropriate.

Overcorrection procedures do seem to help generalize and maintain behavior. As previously mentioned, Ollendick and Matson (1976) noted that reduction in hitting behavior was accompanied by reduction in crying. Epstein, Doke, Sajwaj, Sorrell, and Rimmer (1974) stated that overcorrection produces lasting behavior change. They used positive practice overcorrection to decrease inappropriate hand and foot

movements and vocalizations in two overly active, schizophrenic boys. Through use of this procedure, they achieved a decrease in inappropriate behavior as well as an increase in appropriate play with toys.

Generalization and maintenance are most frequently discussed in conjunction with reinforcement. Much of the work on generalization and maintenance of behavior change has been done by applied behavior analysts. Through their work, the principles of generalization training have been developed. Generalization of behavior does not occur automatically, but needs to be planned for and programmed as part of the teaching process (Stokes & Baer, 1977). The following principles are common to most discussions of generalization programming:

1. Use reinforcers which occur in the natural (mainstream) environment.
2. Practice new behaviors in various settings.
3. Provide instruction from a variety of teachers.
4. Present instruction in a variety of ways.
5. Increase similarities between the training setting and other settings in which the behavior is to occur.
6. Place behavior on an intermittent schedule of reinforcement and introduce some unpredictability into the delivery of reinforcement.
7. Teach the student to manage his or her own behavior (Alberto & Troutman, 1982; Epps et al., 1985; Gardner, 1974; Hammill & Bartel, 1978; Kazdin, 1980).

Like generalization, maintenance does not occur naturally. In order for students to demonstrate newly learned skills and improved behaviors when formal intervention has been discontinued, the teacher must systematically use teaching strategies which promote maintenance. These strategies include overlearning, thinning the reinforcement schedule, delaying reinforcement, fading prompts, and peer reprogramming (Alberto & Troutman, 1982; Epps, Thompson, & Lane, 1985; Gardner, 1974; Walker & Buckley, 1972).

The teaching procedures which facilitate generalization and maintenance have wide applicability. They can be applied to the teaching of academic and social skills as well as to the development of appropriate behaviors. They are applicable to students of all ages, ability levels, and diagnostic cluster types.

In the following sections of this chapter, specific procedures which teachers use to promote generalization and maintenance of skills and behaviors are described.

Natural Reinforcers

Reinforcement which occurs in the natural environment is one of the most powerful tools for generalizing and maintaining behavior change. Students who work hard at academic tasks to obtain good grades or behave well in the classroom for teacher and peer approval are being reinforced for these appropriate behaviors by the natural environment (Alberto & Troutman, 1982). Students who interact with others in socially acceptable ways are reinforced by positive attention from others. Students with behavior disorders often do not demonstrate appropriate behaviors which are reinforced by the natural environment. It is the job of the special education teacher to program for generalization and maintenance by teaching skills and behaviors which will be naturally reinforced.

In order to plan instruction in this area, the teacher must be thoroughly familiar with the natural environment as it is defined for each student. The natural environment may be the regular classroom, a special education program less restrictive than the one the student presently attends, or any other type of setting into which a student will be integrated. For the purpose of this discussion, the natural environment will be a regular education class into which a student is being integrated.

Four steps for using naturally occurring reinforcement were discussed by Epps et al., (1985). The first step is observation of the natural environment such as the regular classroom, the lunchroom, etc. Observations are extremely important as no two classrooms are alike and teachers differ in their degrees of tolerance for specific behaviors (Gesten, Cowen, DeStefano, & Gallagher, 1980). Knowledge of other teachers on a personal level should not take the place of direct observation in their classrooms.

During the observations, the special education teacher needs to look for elements common to the special and regular education environment, such as specific behaviors that are reinforced, behaviors that are not tolerated, the types of reinfc rcement used, and the frequency with which teachers use reinforcement.

The information gained from observations is used to plan instruction. For example, John, a secondary student being integrated into art class, had to be taught to work in a small group without inappropriately interacting with members of other small groups. It was through direct observation of the classroom and discussion between the special education teacher and regular education teacher that instruction was planned to make the integration a successful experience for John. The special education teacher was able to discuss the art teacher's expectations with John. She also provided practice working in small groups

within the special class setting, reinforcing for interacting only with others in his small group.

In the second step, data collected from the classroom observations enables the special education teacher to determine behaviors that are reinforced in the natural environment. When preparing students for integration, the special educator should teach behaviors that will be reinforced after training (O'Leary & O'Leary, 1972).

For integration to be most successful, behavioral, social, and academic skills should be at a proficient (fluent) level (Rhode, Morgan & Young, 1983). That is, the student must receive enough practice in the special education setting to be able to use a skill automatically. The more fluent the student becomes, the greater his chance of being reinforced by the natural environment. For example, Joe, a junior high student, was taught the vocabulary words from his science lesson before the lesson was presented to the class. When Joe could pronounce and define some of the words in the lesson, his peers and his teacher rewarded him verbally. In the special education classroom, Brenda practiced raising her hand every time she wanted to speak in class. When Brenda went to a regular education class, the teacher complimented her frequently because she never needed reminders to raise her hand.

Some students may need more reinforcement than is typically provided in the regular classroom. If this is the case, the third step for using naturally occurring reinforcement can be used. The special education teacher can teach the student how to seek approval and reinforcement for appropriate behavior (Epps et al., 1985). It is best to discuss the acceptable method of seeking reinforcement with regular education teachers. From observations and discussions, the special education teacher must determine how often a student may seek approval in a given class. For example, Bill was integrated in social studies class. He was overly anxious to please adults. If he sought special approval from the teacher too often, he may have been punished. To prevent this, his special education teacher gave Bill a strip of masking tape to put on his behavior note everyday. Bill made a check on the tape when he asked for special approval from the social studies teacher. His special education teacher and his parents reinforced him for having no more than two checks on the tape.

Because many special education students have problems recognizing subtle forms of social reinforcement, the fourth step the special education teacher can take is to teach these signals directly. Teachers often use a wink, a smile, a special nod of the head, etc. as reinforcement. Students should know what kind of reinforcement a teacher provides before they are integrated. For example, Mary was integrated in American Government. The special education teacher taught Mary that the common forms of reinforcement the teacher used were a nod of the head and writing notes on returned papers. Mary was pleased when she had "good" written at the top of her paper the second day in class.

In addition to preparing the student to gain access to reinforcement available in the mainstream environment, the special education teacher should prepare the receiving teacher to avoid accidentally reinforcing inappropriate behaviors. When old and new behaviors serve the same function by permitting access to the same type of reinforcer, the behavior which permits access to the reinforcer more reliably and/or efficiently will be the one that is emitted (Billingsley & Neel, 1985). For example, if teacher attentions a student, the teacher must be sure that attention is more reliably obtained when the student uses a behavior such as raising his hand instead of calling out the teacher's name.

In summary, the special education teacher should observe in the mainstream environment in order to determine behaviors which will be reinforced there. Behaviors which will be naturally reinforced in the integration setting should be taught and practiced until the student can perform them as fluently as possible. Students should be taught to appropriately seek reinforcement if not enough is provided, and to recognize subtle forms of reinforcement. The receiving teacher should be taught how to avoid reinforcing undesirable behaviors which could compete with the student's newly-acquired, appropriate behaviors. The special education teacher should monitor the student's maintenance of acceptable behaviors in the mainstream setting.

Variety in Teachers, Settings, and Examples

The special education teacher should plan experiences for students so that skills and behaviors are practiced under a variety of conditions. Generalization of newly learned skills and behaviors can be promoted by providing student with practice responding to several teachers and working in a variety of settings. Generalization can be promoted by teaching a variety of very similar responses and by teaching examples of responses which are somewhat similar (Epps et al., 1985).

If only one person is involved in teaching, a student's behavior is unlikely to generalize to situations in which different people are present (Epps, 1983; Mithaug, Martin, & Agran, 1987). Fortunately, many

special class teachers have an associate, so there is a "built-in" person to help provide the variety of experiences necessary to facilitate generalization. It is important that both the teacher and associate teacher implement intervention with students.

The teacher may also enlist the help of other adults. Parents can implement interventions at home. Academic or social skill instruction can periodically be provided by the media specialist, the school counselor, or other support personnel. Support persons or administrators who are in the special classroom regularly can assist with behavioral interventions on a class-wide or individual basis.

Other adults, such as the special subject teachers, the principal, secretary, custodian, etc. can serve as "untrained examples" to test whether a student's behavior has generalized. Whenever the student works with an adult other than the special education teacher, data on the student's behavior should be collected. This data will indicate whether the student has practiced a skill or behavior with a sufficient number of adults, or whether additional experiences must be provided. For example, if the special class teacher and associate teacher have taught a student to accept correction without arguing or making excuses, then information from the playground supervisors, principal, and special subject teachers will indicate whether or not the skill "accepting correction" has generalized from the special class personnel to other school personnel.

It is possible in some situations to use a student's peers as additional instructors. Sandler, Arnold, Gable, and Strain (1987) implemented a teacher-directed peer confrontation procedure to reduce the disruptive behavior of three students in a classroom for children labeled behavior disordered/mentally disabled.

The researchers identified target behaviors which would interfere most with the student's future performance in a less restrictive classroom setting. These behaviors included insulting verbalizations and gestures, verbal or gestural threats of aggression, off-task verbalization, and noncompliance. Each time one of the three students engaged in a target behavior, the teacher asked the subject's peers to respond to the following questions:

"_____ seems to be having a problem. Who can tell what the problem is?"

"Can you tell _____ why that is a problem?"

"Who can tell _____ what he needs to do to solve the problem?"

The teacher verbally reinforced students who responded positively to these questions, and both the teacher and peers reinforced the target student for accepting and following the alternatives to the behavior being discussed (Sandler, et al., 1987).

Data collected during this study indicated that peer pressure can be an effective method of modifying maladaptive behavior of classmates. Generalization data indicated that the peers may have derived some indirect benefits from their instruction of others, and that at least one target student maintained the decrease in undesirable behaviors across time. The results suggested that the presence of the target student's peers may have served as a stimulus for appropriate behavior even when the peer confrontation procedure was not in effect (Sandler et al., 1987).

The special education teacher should provide students with instruction in a variety of settings. Huguenin and Mulick (1981) emphasized the importance of teaching a behavior in several settings when working with lower functioning students. McGinnis and Goldstein (1984) stressed the importance of teaching social skills in more than one setting. For example, if the social skill "Ignoring Teasing" is taught in the special education classroom, the media center, the lunchroom, and the hallway, the chances of generalization of that skill to other settings are improved.

Data on the student's behavior should be collected in a variety of settings. If the student has performed appropriately when working in settings which were not part of the intervention, there is evidence that generalization programming has been successful.

Teachers must plan to teach a variety of examples within response classes. A response is made up of a subset of behaviors. These behaviors are interrelated so that an intervention which affects one response will also affect other responses (Epps et al., 1985). For example, if a student is to learn to read words which contain the long sound of "a" spelled "ai", the teacher must teach several examples before asking the student to respond to unfamiliar words containing the "ai" combination.

Teachers must also plan to teach a variety of examples across response classes. An intervention which increases a student's compliance with requests to do something will not necessarily increase that student's compliance with requests not to do something because "do" and "don't" requests belong to different response classes (Epps et al., 1985). Examples of both response classes must be included in an intervention plan.

It is extremely important to gather information on a student's performance in situations not associated with an intervention. Improvements in skills and behaviors which were not included in the intervention should be noticeable. For example, if enough examples within and across response classes have been taught, the student should be able to read unfamiliar words containing "ai". The student should comply with both "do" and "don't" requests which were not directly practiced during the initial intervention to improve compliance.

Certainly all students need to be able to respond appropriately in the presence of someone other than their teacher, need to be able to demonstrate social skills and behaviors in settings other than their special classroom, and, to the extent possible, need to be able to use academic skills to solve novel problems or to perform a variety of tasks.

Variety in Presentation

Because of their unique learning problems, special education students must be taught efficiently, such as presenting instruction in a variety of ways. This is a teaching method that can improve learning and facilitate generalization.

In the past, special education teachers have often been trained to teach a new academic or behavioral skill by "adhering to the same format, presenting items in a predetermined sequence, and requiring mastery of one skill before training on another has begun" (Alberto & Troutman, 1982, p. 288). This rigid method, referred to as serial training (Epps, et al., 1985) can be effective, but it does not result in generalization (Alberto & Troutman, 1982).

A method of teaching which results in more generalization than when only one aspect of the skill is taught at a time is referred to as concurrent training (Epps et al., 1985). A variety of teaching techniques are used when a new skill is introduced, and more than one skill may be taught at a time.

The following is an example which illustrates the differences between the serial and concurrent training methods:

Situation

A female student in a high school BD special class needed to learn to greet peers and adults appropriately and to comb her hair. These skills were chosen because they were important to her social acceptance. Both greeting and grooming skills could be maintained by the naturally-occurring reinforcement the student would receive from peers and adults.

Goals

1. Teach student to greet people properly.
2. Teach student to comb hair so her appearance is more acceptable to peers.

Concurrent Method	Serial Method
Teach student to comb hair by telling and showing student how to comb hair and by praising student if hair is combed.	Teaching student by telling and showing how to comb hair and by praising student when hair is combed.
Teach greeting skills. Teach appropriate greetings for peers and adults.Set up contract with student for learning both skills.	Reward student for entering room with hair already combed.
Practice greetings in classrooms, with school nurse, and with school office personnel whom student visits daily.	Continue program daily until student enters room with combed hair each day for one week.
Reinforce student for entering classroom with hair already combed.	Teach student proper greeting technique.
Check daily progress on both skills.	Write contract for greeting teacher every day for one week.
Contact parents and enlist cooperation for weekend checks.	Consider both skills learned when those criteria are met.

Arrange for consultant to be in classroom when student enters to test generalization of greeting skills.	**Outcome**
Ask another teacher to exchange rooms occasionally during first few minutes of class to check student's greeting skills.	The third week the student's hair is uncombed and she fails to greet substitute teacher.
After three weeks, student is consistently greeting people and coming to class with combed hair.	Generalization has not occurred.
Arrange to thin rewards on contract and inform student her progress on contract will be checked infrequently.	Recycle each goal one by one.
Four weeks after initiating training, a substitute teacher was greeted by the student. The student's hair was neatly combed.	
Generalization occurred.	

In the example of concurrent training, two skills were taught at the same time and a variety of trainers were involved. Both techniques promoted generalization of these skills. Thinning the reinforcement schedule and monitoring at unpredictable times helped maintain the skills. Because these skills were reinforced by the student's natural environment, the skills were both generalized and maintained (Kazdin, 1980).

Several other instructional techniques also promote generalization. Teachers can use these techniques when teaching academic skills and concepts, acceptable behaviors, and social skills.

1. Use a variety of people to teach the student and to check the skills. This is most important when teaching social skills.
2. Use variety in presentation of content. For example, when teaching addition, present $2 + 3 = \_\_\_\_$, $\begin{array}{r} 2 \\ +3 \\ \hline \end{array}$ $\begin{array}{r} 2 \\ + \\ \hline 5 \end{array}$ $2 + \_\_\_ = 5$, $3 + 2 = \_\_\_$
3. Use variety in lesson presentation. Use the overhead projector, the chalkboard, and worksheets. Lecture, discuss, work in small groups, give quizzes, etc.
4. Teach more than one behavior at the same time. For example, target both accuracy and neatness in math computations.
5. Pair teaching a nonacademic skill such as organization with academic skill training.
6. Schedule periodic reviews of skills previously taught. Write this schedule in the plan book.

These techniques can be used to promote generalization when teaching any type of skill to special education students (Epps et al., 1985; Vaughn, Bos, & Lund, 1986).

Unpredictability in Reinforcement

When students are learning a new skill or behavior, they should be reinforced each time they demonstrate the desired behavior. However, in order for the newly learned behavior to generalize and be maintained, the reinforcement schedule must gradually be thinned and must become less predictable (Alberto & Troutman, 1982). An element of planned unpredictability helps promote both generalization and maintenance (Epps et al., 1985).

There are several ways in which the special education teacher can manipulate reinforcement to promote generalization. One is to use very thin (infrequent) schedules of reinforcement. This technique involves a gradual decrease in the amount of reinforcement provided until the schedule matches that which occurs in the natural environment.

Introducing a delay in the delivery of reinforcement is another way to plan for unpredictability in reinforcement and thus promote generalization. If a period of time passes between performance of the behavior and delivery of reinforcement, it is more difficult for the student to determine when and where the contingency is in effect. This makes it more likely that the student will demonstrate the desired behavior under a wide variety of conditions (Alberto & Troutman, 1982).

A third way to introduce unpredictability is to intentionally make it unclear to the student which behaviors will be reinforced. This can be done when the student has demonstrated appropriate levels of several

behaviors.

Epps et al. (1985) provided a clear example of a teacher's use of planned unpredictability in reinforcement. A teacher whose students were doing academic work at an acceptable level of accuracy targeted neatness in reading work, neatness in math work, and completing work on time as three behaviors to improve. At the beginning of the intervention, points were given immediately each time a student met the criteria for one of the three behaviors.

After the three target behaviors were being demonstrated at an acceptable level, the teacher introduced a delay in reinforcement. He told the class that points would not be awarded until the end of the morning. A few days later, the teacher intentionally made it unclear to the students which behaviors would be reinforced on which day. He began by reinforcing two of the three behaviors at the end of the morning, and then reinforced one of the three behaviors. The students were not told until the end of the morning which behaviors were earning reinforcement.

This teacher then proceeded to thin the schedule of reinforcement. He put green and red chips in a basket. At the end of the morning, a student covered her eyes and chose a chip. If a green chip was chosen, the students earned reinforcement. If a red chip was chosen, they did not. The teacher gradually added more red chips to the basket to make reinforcement less frequent.

It is also possible to use unpredictability of reinforcement as a technique when the goal is to decrease a behavior (Epps et al., 1985). If the teacher uses a response-cost procedure, and intentionally makes it unclear to the student which behavior will be consequated, a decrease in two inappropriate behaviors may be observed even though only one of the behaviors resulted in a loss of points.

For example, Tammy frequently talked out and left her seat during math class. She was informed that she would be assessed a point fine at the end of the class period and that the amount of the fine would depend on the number of times she talked without permission or the number of times she left her seat. Tammy was not told which behavior the teacher was counting until the end of the period. This technique effectively reduced the number of times Tammy talked out and left her seat.

Another way to use the power of unpredictable reinforcement when programming for generalization is to make it unclear to the students in which settings their behavior will and will not be reinforced. They will then be more likely to behave appropriately in several settings.

These techniques must be used with caution. Sometimes a desirable behavior occurs at almost the same time as undesirable one. An intervention designed to decrease the inappropriate behavior may inadvertently decrease the appropriate behavior as well (Epps et al., 1985). For example, a student who raises his hand at the same time as he blurts out an answer may stop volunteering in class if a response-cost procedure is applied to decrease blurting out. The teacher must carefully monitor the effect an intervention applied to an undesirable behavior may be having on a desirable behavior. If a desirable behavior is also being decreased, the teacher must make the consequence more behavior-specific and design an intervention to increase the desirable behavior.

Teaching for Integration

The goal of special education for students with behavior disorders is improvement in behavior so that the student can participate in a less restrictive educational setting and can participate more fully and successfully in everyday life. In attempts to achieve behavior change, special education teachers often alter academic conditions, implement reinforcement systems, use study carrels or other private seating arrangements, and provide considerable supervision and prompting for both academic work and social behaviors.

Within the "specialness" of a special education setting, however, there must be specific programming of common elements between less restrictive and more restrictive settings if students are to be successful in mainstream environment. It is essential for special education teachers to provide direct practice in dealing with routines, instructional styles, academic expectations, and teacher-pupil interactions which are different from those the students experience in their current classes (Johnson & Griffith, 1985). (Again, for the purpose of discussion, the mainstream environment will be defined as a regular education class into which a student is being integrated.)

According to Gresham (1984):

> Handicapped students are either reintegrated into regular classrooms where they have experienced academic and/or social failure, or they are placed for the first time in an environment where they have no basis for efficacy (i.e., they have no learning history in the regular classroom).

> The likely result of these two cases is that handicapped children will experience failure, a low sense of self-efficacy, and exhibit behaviors to avoid demands placed on them in the regular classroom (e.g., social withdrawal or acting out). (p. 256)

Johnson and Griffith (1985) pointed out that the accepted patterns of behavior in a classroom are established during the first few weeks of school. Thus, individuals coming into a class after that time are at a disadvantage because they don't know the accepted patterns (Johnson & Griffith, 1985).

The special education teacher can do much to prevent problems for reintegrated students by carefully analyzing the regular class and programming common elements between the special and regular class settings.

There are two basic ways to program the common elements of the special and regular education settings. The first is to introduce elements of the regular education setting into the special education setting. Common elements can be people, instructional materials, physical objects, room arrangements, or procedures such as schedule, method of presentation, teacher cues, use of chalkboard, etc. (Epps et al., 1985).

The following are suggestions of ways to introduce elements of the regular education setting into the special education setting:

1. Use some of the same instructional materials present in the integration setting. Make similar assignments.
2. Use similar instructional techniques. Give students practice attending to a teacher who lectures, who uses the chalkboard or the overhead projector, who sits at a desk, walks around the room, instructs from the front, etc.
3. Give students practice with various seating arrangements. Tables or individual desks arranged in rows or groups are more common to regular education classes than are study carrels or desks spaced widely apart.
4. Arrange the special class schedule to match the regular class schedule.
5. Introduce a peer tutor into the special education setting. This student should be a person who will be in the regular education class with the student to be integrated.
6. Use the same verbal cues that the regular class teacher uses to prepare students for work and for transitions.
7. Use the same types of reinforcement available in the regular education setting.

The second method of programming for commonality between the special and regular education setting is to introduce elements of the special setting into the regular class. A student for whom a small desk decoration has special meaning may be allowed to take the decoration to the desk in the regular class. The regular class teacher may copy a phrase that the special education teacher uses to cue a student's appropriate behavior. A learning center which the student enjoys in the special class may be duplicated in the regular class and the student may be given access to it during the integration period. Some students benefit from taking their point cards with them to the integration, even if the regular education teacher does not award points.

The special education teacher should have both good communication with the regular class teacher and a thorough knowledge of the regular class setting in order to use these two methods of programming for generalization. The teacher should have an organized way of collecting information about the regular classroom. A form adapted from the Common Stimuli Form (Epps, et al., 1985) which provides a structured way for the special education teacher to gather this information is included in the Appendix. It was designed for use in secondary schools, but could be adapted for elementary classes.

Epps et al. (1985) suggested that five basic steps be followed when a form such as this is used. First, the special education teacher should interview the regular class teacher by asking for the information on the form. It is important to make it clear that the instructional methods and classroom environment of the regular class teacher are not being evaluated. The special education teacher should emphasize the need for making the special education setting as similar as possible to the regular class.

Much information can be gathered from the interview, but it is very important that the special education teacher also observes in the regular class (Rosenkoetter & Fowler, 1986). During the observations, special attention should be paid to the kinds and amounts of reinforcement used by the regular class teacher, the kinds of verbal and nonverbal cues used, and the kinds of behaviors demonstrated by the students in the class, as well as the consequences of these behaviors.

After the special education teacher has interviewed the regular class teacher and observed in the classroom, the items on the form should be reviewed. Each component of the regular class that is different from the special education setting should be identified.

The special education teacher should then determine which elements of the special education setting could and should be changed to make them similar to the regular class and which elements of the regular education teacher's procedures should be introduced into the special setting. The special education teacher must determine which items will have the greatest impact on the student's chances for success in the regular class and make them the priorities for change.

It is essential that the student who is to be integrated be able to meet the teacher's minimum behavioral standards for classroom rules and be able to relate effectively to new peer groups (Walker, et al., 1982). The special education teacher should carefully analyze the behaviors identified by the regular class teacher as particularly pleasing or displeasing and should analyze the social skills most necessary for successful interaction with that teacher or peer group. Then the teacher should plan instruction so that the student has a social/behavioral repertoire that is consistent with the social/behavioral demands of the receiving environment (Hersh & Walker, 1982).

While the special education teacher is preparing the student for integration, special emphasis should be given to teaching the student behaviors which will allow him or her to receive as much of the naturallyoccurring reinforcement in the regular classroom as possible.

Self-Management and Generalization

Instruction in self-management is an important component of programming for generalization and maintenance (Gardner, 1974; Kazdin, 1980). Workman (1982) suggested teaching students the behavioral self-control strategies of self-assessment, self-monitoring and self-reinforcement as a means of enhancing the generalization and maintenance of improvements in students' behavior. Gambrill (1977) agreed that observation of one's behavior, evaluation of that behavior according to some criteria, and the offer of self-reinforcement depending on whether the behavior meets the criteria are powerful techniques which influence the persistence of behavior change. Alberto and Troutman (1982) included self-recording, self-reinforcement, self-punishment and self-instruction in their list of self-management strategies.

Teachers can prepare students to learn self-management or self-control strategies by incorporating the following techniques into the behavior management program in use in the classroom.

1. Always describe the behavior which earned the reinforcement being delivered.
2. Ask the student to explain why reinforcement was earned or lost.
3. In the case of inappropriate behavior, ask the student to explain what he or she should have done instead and what the consequences of the inappropriate behavior were.
4. Ask the student to describe the consequences of appropriate behaviors.
5. Involve students in choosing reinforcers and in determining their costs (Alberto & Troutman, 1982; Epps et al., 1985).

Students who have been exposed to such techniques will often voluntarily make statements about their behavior and its consequences. Alberto and Troutman (1982) stated that it is a small step from asking a student how many points she has earned and why to allowing her to record the points herself.

Self-Recording

The use of self-recording, or self-monitoring, has been proven effective in helping students generalize performance of prevocational social skills (Kelly et al., 1983; Kiburz, Miller & Morrow, 1984). Alberto and Troutman (1982) cited numerous studies which have demonstrated the effectiveness of self-monitoring in increasing a student's rate of paying attention in class, academic response, attendance, appropriate verbalizations, and decreasing verbal interruptions, aggression, and off-task behavior.

When the student is responsible for systematically monitoring and recording his or her own performance, the student is managing at least one part of the program for behavior change. In some cases, the act of monitoring behaviors may have an effect on the behavior being recorded and the behavior may change in the desired direction (Workman, 1982). However, the effects of self-monitoring on the generalization of behavior change were found to be greatest when self-monitoring was paired with reinforcement (Kiburz, et al., 1984). Workman (1982) pointed out that the two major self-recording systems, frequency self-monitoring and interval self-monitoring, can be used with individuals of widely varying ages and ability levels, and can be used in a wide variety of situations.

As discussed by Workman (1982), several components should be included in any program to teach students to self-record. The teacher must first design the data-collection system by determining a target behavior, defining it in precise, measurable terms, and deciding which recording technique will provide the most accurate data while being uncomplicated enough for the student to use.

The teacher should then use the system to make sure the behavior is defined specifically enough and the recording system is not too cumbersome. Self-recording systems often make use of tally sheets, wrist counters, graphs, and charts.

The teacher must then carefully explain exactly what behavior the students are to record. It is important to spend considerable time with this step, and to include role-plays which allow students to practice deciding whether or not to record the behavior.

The next step is to teach the students to use the self-recording system. The teacher should tell and show the students what to do and praise their efforts. Before the student self-records independently, the student and teacher record simultaneously and the student is reinforced for accuracy in recording. Once the student is self-recording independently, the teacher should also record periodically to monitor the student's accuracy.

Self-Reinforcement

Self-reinforcement includes both the use of overt self-reinforcement and covert positive reinforcement. Overt self-reinforcement involves students presenting themselves with actual reinforcers, contingent upon appropriate behaviors. Covert positive reinforcement involves students systematically imagining themselves receiving reinforcers (Workman, 1982).

Overt self-reinforcement is basically an extension of self-recording. The transition from teacher-managed to student-managed programs must be gradual, and students must be taught to use self-reinforcement.

The teaching procedure consists of the following steps:

1. A self-recording procedure is already being used by the students.
2. The teacher determines what back-up reinforcers will be used to motivate the students. Students must have input as to which reinforcers are most meaningful to them.
3. The teacher determines how many points have been earned and the students record these.
4. The teacher asks the students to help decide how many points should be awarded for appropriate behavior. They should be prompted to set fairly stringent standards.
5. The students practice self-reinforcement. In the initial steps, the teacher monitors closely to be sure the students are awarding points correctly and prompts when necessary. The teacher also reinforces students for self-reinforcing.
6. The teacher monitors self-reinforcement less frequently, helps the students select other back-up reinforcers if necessary, and systematically thins the reinforcement schedule.

The covert positive reinforcement procedure involves having a student imagine being in a situation where a certain appropriate behavior is needed, engaging in the behavior, and experiencing a highly positive/ pleasurable scene serves as a reinforcer for the appropriate behavior imagined by the student (Workman, 1982).

The teacher must first determine several reinforcers to be used as the positive images and can do this by asking students to list several events they really like, for example, eating out, playing with a favorite toy, visiting with a rock star, etc. A list of several events which are reinforcing to all of the students should be compiled, and then the program for covert reinforcement can be begun.

Workman (1982) recommended that teachers use the following three steps:

> **Step 1** Tell your students to imagine themselves in the situation where you want their behavior to improve. For example, you might say, "I want all of you to close your eyes and imagine yourself in this class. Now imagine that I am telling you to take out your reading workbooks to do the assignment."
>
> **Step 2** Then have your students imagine themselves successfully engaging in a behavior that is appropriate to the above classroom situation. For example, "now imagine yourself taking out your workbook and really working hard on the reading assignment. Be sure that you keep your eyes closed and imagine this as clearly as possible."
>
> **Step 3** During the final step, instruct your students to imagine one of the highly positive events from their lists. For example, "Now, imagine yourself getting to meet all the stars of your favorite television show. Imagine that you're really excited, and the stars are all talking with you and being friendly." (pp. 85-86)

Workman (1982) further recommended that each step in this procedure be followed immediately by the next and that each should last at least twenty seconds in order for the procedure to be effective. The students should be taught a signal so they can indicate when they can visualize an image so the teacher can approximate a twenty second duration for each image.

When the covert positive reinforcement system is first used, the teacher should take the students through the three steps five to ten times per day, alternating the reinforcing scenes chosen by the students. As success is achieved, the frequency of use of the procedure should be decreased to two or three trials carried out three days per week (Workman, 1982).

Self-Punishment

Self-punishment is a self-management technique which should never be used alone (Epps et al., 1985). Self-punishment usually takes the form of a response cost in conjunction with a token or point system. The procedure used to teach a student to self-punish is similar to those used to teach self-monitoring and self-reinforcing, and includes a gradual transition from teacher-management to student-management.

Epps et al. (1985) discussed five questions which should be considered before a student is taught to use a self-punishment procedure.

1. Will the use of self-punishment add to the effects of self-recording and self-reinforcement? What will this procedure contribute to behavior change or to generalization.
2. Is the student more likely to earn points than to lose them? The situation of a student being "in the hole" is to be avoided.
3. Will the self-punishment procedure cause the student to focus on failures rather than on improvements? Students who already tend to emphasize the negative should probably not be taught this procedure.
4. The student is probably already involved with self-recording and self-reinforcing. Can the student add another component to his or her self-management, or would this be too confusing?
5. In what stage of learning is the student? If a student's rate of response is important, response cost should probably not be used because it often causes students to work more slowly to avoid errors. If a student is just acquiring a skill, a slow rate of response is expected anyway, and response cost may be used.

Self-Instruction

Self-instruction is a process of providing one's own verbal prompts or "talking oneself through" a task. Self-instruction enables students to guide themselves through the process necessary to solve problems (Alberto & Troutman, 1982), and to give themselves feedback about the adequacy of their performance (Workman, 1982).

Alberto and Troutman (1982) cited several studies which demonstrate the effectiveness of self-instruction training in increasing on-task behaviors in hyperactive and impulsive children, increasing students' abilities to demonstrate academic skills, and increasing appropriate social behaviors. Workman (1982) recommended self-instruction training for reducing impulsive/disruptive behaviors and increasing on-task behavior of early elementary-aged students.

Students can be taught the self-instruction strategy individually or in small groups of three or four. Most training in self-instruction follows a five-step procedure outlined by Meichenbaum and Goodman (1971).

1. The teacher performs a classroom task while talking aloud (cognitive modeling). While the teacher demonstrates the task, he or she verbalizes the following four types of statements:
   a. questions about the requirements of the task ("What am I supposed to do?");
   b. answers ("I must carefully draw lines to show which match");
   c. self-instruction to guide task-completion ("I start with this top word and draw a line to its match. Then I do this next one . . . ");
   d. self-reinforcement statements ("That's right. I'm doing fine.").

   The teacher should also model procedures for coping with and correcting errors (Workman, 1982).
2. The student performs the same task while the teacher verbalizes as above (overt, external guidance).
3. The student performs the task while he instructs himself aloud (overt self-guidance). The teacher provides corrective feedback.
4. The student whispers the instructions while performing the task (faded, overt self-guidance). The teacher provides corrective feedback.
5. The student performs the task while thinking about the steps in the task (covert self-instruction).

Most self-instruction procedures are taught along with self-monitoring and self-reinforcement strategies. The teacher must spend much time developing and modifying the program necessary to teach self-management techniques, but the resulting improvement in generalization and maintenance of behavior change can be significant.

Overlearning

Overlearning helps maintain newly-learned skills and behaviors (Epps et al., 1985). There are several teaching strategies which help a student overlearn a skill so that it can be performed "automatically". The teacher can provide the student with many opportunities to practice the skill. The teacher can design instruction so that the first skill is a part of the second skill taught. Thus, the student is practicing skill #1 whenever he or she is practicing skill #2. The teacher can also provide the student with opportunities for repeated practice of the skill or behavior under a variety of conditions. Overlearning allows the student to have repeated success with a new skills or behavior (Epps et al., 1985).

According to Gardner (1974), when the student is acquiring the new academic or behavioral skill, it is important that the teacher reinforce the student for each correct response. Reinforcement, be it tangible paired with social, or social only, should be immediate and contingent on performance of the desired response. The teacher should plan enough variety in the reinforcement so that the student does not become tired of it.

Thinning the Reinforcement Schedule

Gambrill (1977) stated that many studies have shown that behavior change will not be durable if reinforcement is delivered continuously. After overlearning has occurred, the reinforcement schedule must be thinned. This is a gradual process of making reinforcement available less often. When a behavior is maintained at the criterion level, an effective thinning schedule is being used. If a behavior decreases substantially, reinforcement is being withdrawn too rapidly, and a temporary return to an earlier reinforcement schedule should be made (Gambrill, 1977).

Thinning the reinforcement schedule requires teachers to move from continuous reinforcement to intermittent reinforcement to a variable schedule of reinforcement that is sparse, infrequent, and similar to the level of reinforcement occurring in the natural environment (Epps et al., 1985). Observations in mainstream settings must be done in order to determine the amount of reinforcement available in those settings. If reinforcement is not reduced to the degree available within the mainstream setting the student will be entering, the student is being predisposed to failure (Martinez, 1985).

Delaying Presentation of Reinforcement

By delaying the presentation of reinforcement, the teacher approximates conditions in a mainstream setting where reinforcement is usually not delivered immediately. Like thinning the reinforcement schedule, delaying reinforcement is a gradual process.

The teacher can delay reinforcement by increasing the behavioral expectations before the student is reinforced (Epps et al., 1985). For example, when the student was initially required to do ten math problems to earn a reinforcer, now fifteen math problems are required before reinforcement is given.

The teacher can also increase the time interval between the student's behavioral response and the delivery of reinforcement. Reinforcement for task completion given every task period can be delayed so that it is given at the end of the morning and afternoon class sessions.

If a student is working with a token system, reinforcement can be delayed by increasing the time the student must wait between receiving the tokens and exchanging them.

The teacher can also delay reinforcement by requiring that the student have more points or tokens to get a desired reward.

Fading Prompts

If academic, behavioral, and social skills are to be maintained, a teacher must help students function as independently as possible. The gestural cues, or physical guidance used with a student to a level where the student's behavior is occurring spontaneously under natural cue conditions (Billingsley, 1987; Gardner, 1974). For example, in the initial stages of teaching the skill, a teacher may have to physically assist a student to dry his hands after washing them, but it would be necessary to gradually remove the physical prompt in such a way that the presence of the towel would cue the student to dry his hands.

Alberto and Troutman (1982) discussed ways to fade, or gradually remove, many forms of prompts. Verbal instructions may be faded gradually by combining two instructions or by decreasing the amount of information given in each instruction. Other types of verbal prompts may be provided more and more quietly until they consist of mouth movements with no sound. Visual (written) prompts may be made lighter and lighter until they disappear entirely. Modeled prompts may be faded by increasing the distance between the model and the student, or by having the model demonstrate less and less of the skill, fading

the demonstration eventually to a mere gesture. Physical prompts may be faded by initially providing as much physical assistance as necessary, then gradually reducing the pressure and moving the physical guidance away from the part of the body concerned. For example, the teacher may initially prompt writing by guiding the student's hand, but will gradually move that guidance to the wrist, elbow, and finally the student's shoulder.

If prompts are maintained for too long, students will depend on them. Prompts must be faded as the desired behavior gains strength, but if the prompts are removed too quickly, the desired behavior may stop (Gardner, 1974). It is essential for the teacher to monitor the student's maintenance of skills and behaviors as prompts are faded, and to adjust the fading procedure accordingly.

Peer Reprogramming

Walker and Buckley (1972) defined peer reprogramming as a strategy which could be used to maintain a student's post-treatment, appropriate behavior in a mainstream setting. The student's peer group is taught to behave in ways which support the student's attempts to use appropriate social and academic behavior, and to ignore inappropriate behaviors. The target student has an opportunity to earn points for appropriate social and academic behavior and to exchange these points for group reinforcement for the entire class.

In a study by Walker and Buckley (1972), students who were returned from a special class to a regular class using the peer reprogramming strategy maintained 77 percent of the amount of appropriate behavior which had been produced in the special treatment setting.

Peer reprogramming could be especially useful in reducing the possibility that a student who is reinforced by attention from his peers will return to his well-established, efficient (but inappropriate) means of getting that attention. If the student's peer group can be taught to attend to him when he uses his newly-learned skills of raising his hand and making comments which are on the topic, and can be taught to avoid reinforcing with eye contact or laughter his occasional blurt-outs or off-the-topic comments, then the undesirable behaviors will be less and less likely to compete with the newly-learned behaviors. The functionality of undesirable behaviors may be reduced by ensuring that they are not reinforced, or by reducing their efficiency in gaining access to reinforcement (Billingsley & Neel, 1985).

DATA COLLECTION

Data collection is an essential part of programming for generalization and maintenance because data on a student's performance helps a teacher plan instructional and reinforcement strategies. For example, if data indicates that Mark consistently makes requests of the special education teacher in an appropriate way, but does not make eye contact or use a polite tone of voice when making a request of the school secretary, the teacher will plan for Mark to practice that social skill with more adults. If data indicate that Joe consistently waits his turn to talk in the special classroom, but blurts out whenever he is working in the media center, the teacher should provide instruction in a wider variety of settings.

By analyzing the data, the special education teacher can make changes in reinforcement which promote both generalization and maintenance. For example, if Jane demonstrates a high rate of appropriate behavior in the special education setting, but data indicate that she is not maintaining that rate in the mainstream setting, the special education teacher can investigate reinforcement issues such as whether the reinforcement schedule has been thinned enough or whether inappropriate behaviors are being reinforced which compete with newly-learned appropriate behaviors.

Information about a student's generalization and maintenance of a skill or behavior should be gathered by using both formal and informal methods of data collection (Epps et al., 1985). It is essential to formally observe a student in several settings, working with different teachers, and at different times of the day. Data should be collected frequently at first to determine whether or not the student is maintaining the desired level of performance. A schedule for collecting this data on maintenance should be developed.

It is important that someone other than the special education teacher conduct the formal observations. Ideally, data should be collected by a person who seldom works directly with the student. If it is possible to use only personnel known to the student, then it is of increased important that observations are done frequently and under as wide a variety of conditions as possible.

Epps et al. (1985) suggest that if observations conducted for at least three days in a row indicate that the student is maintaining the behavior at the desired level, then the frequency of data collection can be gradually reduced. However, whenever an observation indicates that the student's performance has dropped below the desired level, an observation should be scheduled for the following day. Subsequent

observations will indicate whether the student had an "off day" or whether at least a part of the intervention that improved the student's skills or behavior should be reinstated.

Informal visits among teachers and other adults who have contact with the student can also yield much valuable information about a student's performance. The special education teacher can ask others about specific behaviors, or can request more general information such as how a student's performance compares with that of other students in the class.

It is important to develop a systematic way to record information that has been gathered informally. Figure 1 is a chart developed by Epps et al. (1985) which offers a structured way to record that type of information. It could be modified to include any behaviors of concern for a particular student, and allows the special education teacher to record information gathered in at least three settings. While the use of such a chart makes information data collection more systematic, it must not take the place of formal observation as a primary source of data on a student's generalization and maintenance of skills and behaviors (Epps et al., 1985).

CONCLUSION

Programming for generalization and maintenance takes much time and effort. It involves observation of mainstream settings and analysis of reinforcers which occur naturally in those settings. It involves systematic planning so that students have experiences with a variety of instructors and several settings. It involves the purposeful use of a variety of instructional methods, and it involves teaching students to manage their own behaviors.

Programming for generalization and maintenance also involves close communication between the special and mainstream teachers. The special education teacher needs to know as much as possible about the mainstream setting so that he or she can introduce elements of the mainstream setting into the special setting. Communication between teachers must be close so that the special education teacher can help the mainstream teacher avoid errors with reinforcement.

To effectively program for generalization and maintenance, the special education teacher must carefully manage reinforcement. Appropriate behaviors which will be reinforced in other settings should be overlearned in the special setting. Then elements of unpredictability in reinforcement should be introduced, the reinforcement schedule should be thinned, and prompts should be faded systematically.

Programming for generalization and maintenance also involves data collection. Without data on a student's performance in a variety of situations, the special education teacher cannot make instructional or reinforcement programming changes which will facilitate generalization and maintenance of skills and behaviors.

The key to the transition from the special to the mainstream setting is "the set of intermediate steps which allow for gradual fading and reduction of reinforcers, materials, and teacher interactions" (Vaughn, Bos, & Lund, 1986, p. 180). This kind of programming is a challenging task, and the special education teacher needs the support and assistance of the principal, support staff members, other teachers and school personnel, and parents. Since the goal of teaching is to provide students with skills and behaviors to use all their lives, programming for generalization and maintenance is a challenge that educators must accept.

Figure 1

INFORMAL MAINTENANCE PROBES

KEY:	+	Great (in top 3-5 students)*	_	Poor (in bottom 3-5 students)*
	✓	O.K. (any students between top 3-5 and bottom 3-5)	0	Not Applicable

* "top" and "bottom" groups will vary depending on the class, setting, and activity

STUDENT'S NAME : _____

Settings:

Behaviors	Dates:														
Assignments completed															
Assignments accurate															
Follws rules/directions															
Needs few reminders to start work															
Seeks teacher attention appropriately and not too often															
Does not talk out															
Does not get out-of-seat often															
Does not bother other students verbally															
Does not bother other students physically															
_____															
_____															

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Appendix

CLASS ANALYSIS FOR REINTEGRATION

Class title: _____
Teacher: _____
Date: _____
Attach course description if available.

ACADEMIC SKILLS

1. Required reading:

25-30 pages per week		
15-24 pages per week		
5-14 pages per week		
1-5 pages per week		
none		

2. What adaptations in reading could be made or have you found to be successful?

_____

_____

3. Required math skills:

addition		
subtraction		
multiplication		
division		
measurement		
money		
fractions		
decimals		
must memorize formulas		
may use guide for formulas		
may use calculator in class		
none or other		

4. What adaptations in use of math could be made or have you found to be successful?

_____

_____

5. Required writing:

10 pages per week (a term paper)		
5 pages per week (a theme)		
1 or 2 pages per week (essay questions)		
just words or phrases		
note taking		
none or other		

6. What adaptations could be made or have you found to be successful?

_____

_____

INSTRUCTIONAL METHODS

7. Teacher instructs from:

front of class		
desk		
moves around the room		
other (specify)		

8. Assignments:

same assignment to all		
different assignment for different students		

9. Teacher assigns work to be completed:

independently		
in groups		

10. Repeats directions or questions:

never		
sometimes		
always		

11. Teacher requirements for completion of assignments:

must be finished in a set time period		
may be taken home		

12. Evaluation of assignments:

teacher evaluated		
pupil evaluated		
not evaluated		

13. Correction methods:

counts number correct		
counts number wrong		

14. Assignments are handed back to pupil:

same day		
next day		
a few days later		

15. Basis of pupil evaluation: (note approximate percent)

daily work		
tests		
class participation		

what is the penalty for late work?

16. Please give an example of a typical assignment, or attach an assignment sheet if one is used.

17. How do you let students know they are doing OK?

verbal positive comment		
written positive comment		
frequent report of current grade		
when no comment is given student must assume he/she is doing OK		

TEACHER EXPECTATIONS (It is not necessary to fill in all blanks.)

18. Important classroom rules to follow:
    a. _____
    b. _____
    c. _____
    d. _____
    e. _____
    f. _____

19. Classroom routines:
    a. _____
    b. _____
    c. _____
    d. _____

20. Procedures for getting assignments when ill:
    a. _____
    b. _____
    c. _____

21. Behaviors teacher emphasizes and reinforces:
    a. _____
    b. _____
    c. _____

22. Behaviors students in your classes (in the past) have tended to emphasize and reinforce:
    a. _____
    b. _____
    c. _____

23. Behaviors teacher finds particularly difficult to tolerate:
    a. _____
    b. _____
    c. _____

CLASSROOM ADAPTATION SKILLS

24. Movement:

must sit in seat all class period		
must sit in seat but can move at will occasionally		
must sit in seat but is free to move about to complete project work		

25. Speech:

cannot talk to peer		
can talk to peer when teacher or students are not talking		
can talk to peer when working on projects		

26. Initiative:

must copy from board		
must take notes or copy notes from board		
must listen carefully to notice when activity or assignment changes		

27. Group work:

must select own partner for small group work		
partners are randomly chosen for small group work		
must be able to complete work in small group		
can take small group work from room as homework		

28. Self-control:

occasional inappropriate responses not tolerated		
occasional inappropriate responses will be tolerated		

29. Teacher assistance:

students may seek individual help		
during class (appropriately)		
before class		
after class		
before school		
after school		
during planning period		
disproportionate use of teacher's time will be discouraged		

30. In the event of mutual agreement this student is placed in your class, how do you wish to communicate student behavior and academic progress?

daily check list sent with student		
weekly check list sent with student or in your mailbox		
personal contact with special class teacher; time best for you _____		
personal contact with associate special class teacher; time best for you _____		
contact initiated only by regular education teacher		

31. Are you willing to permit observations of student in classroom setting?

anytime		
notify me first		
this is not helpful		

In the event of a response that indicates the student would be inappropriately placed in this class following completion of this check list, the form below should be filled out and placed in the student's file.

We are aware that _____ cannot appropriately be placed in _____ at this time because the requirements of this class do not meet his/her goals or his/her academic or behavioral needs.

_____	_____
Administrator	Parent
_____	_____
Regular Class Teacher	Parent
_____	_____
Special Class Teacher	Counselor
_____	_____
Student	Date

If placement is still desired, the following course of action will be taken: (Include specific instructional goals to improve the student's ability to be successful in this class and possible modifications to be made in the structure or expectations of the class.)